

DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION FOR IRELAND.

TWELFTH
ANNUAL GENERAL REPORT
OF THE DEPARTMENT,
1911-12

Presented to both Houses of Parliament by Command of His Majesty.



LONDON:

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

To be purchased, either directly or through any Bookseller, from

E. PONSONBY, LTD., 116 GRAYSON STREET, DUBLIN; or
WYMAN AND SONS, LTD., FETTER LANE, E.C., & 32 ABINGDON ST., LONDON, S.W.; and
54 ST. MARY STREET, CARDIFF; or
H.M. STATIONERY OFFICE (SCOTTISH BRANCH), 23 FORTH STREET, EDINBURGH;
or from the Agencies in the British Colonies and Dependencies,
the United States of America, the Continent of Europe and Abroad of
T. FISHER UNWIN, LONDON, W.C.

PRINTED BY

BROWNE AND NOLAN, LTD., NASSAU STREET, DUBLIN.

1913.

[Cd. 6647.]

Price Two Shillings and Twopence.

GOVERNMENT PUBLICATIONS.

1. **Government Publications** (with the exceptions mentioned in paragraphs 2 to 6) can be bought, either directly or through any bookseller, from—
 WYMAN & SONS, LTD., Fetter Lane, London, E.C., and 54 St. Mary Street, Cardiff; or
 H. M. STATIONERY OFFICE (SCOTTISH BRANCH), 23 Forth Street, Edinburgh; or
 E. PONSORRY, LTD., 116 Grafton Street, Dublin; or
 or from the Agencies in the British Colonies and Dependencies, the United States of America, the Continent of Europe and Abroad of
 T. FISHER UNWIN, London, W.C.
 Booksellers, and the accredited agents of Free Public Libraries, are entitled to a discount of 25 per cent. from published prices.
2. **Hydrographical Publications of the Admiralty** are sold by—
 J. D. POTTER, 145 Minories, London, E.C.
3. **Patent Office Publications** are sold at—
 The Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.
 (N.B.—Classified Abridgments of Patent Specifications are sold also by Wyman and Sons, Ltd.)
4. **Ordnance Survey and Geological Survey Publications** can be purchased from—
 The Director-General of the Ordnance Survey, Southampton; or
 The Superintendent, Ordnance Survey, Dublin; or
 Agents in most of the chief towns in the United Kingdom.
 (N.B.—Small Scale Maps are, as a rule, procurable at Railway Bookstalls in England and Wales.)
5. **The Journal of the Board of Agriculture** is published monthly by the Board, at 4 Whitehall Place, London, S.W. Price 4d.
6. **The London Gazette** is published on Tuesday and Friday evenings by Wyman and Sons, Ltd. Price 1s.

The following is a list of some of the more important Parliamentary and Official Publications recently issued:—

Statutes—

<i>Public General Acts, Local and Personal Acts, 1912.</i> In separate Acts, at varying prices	
<i>Public General, Session 1911.</i> With Index, Tables, &c.	7s. 6d. each
<i>Second Revised Edition, 1235-1900.</i> Vols. I. to XX.	10s. each
<i>Statutes in Force. Chronological Table and Index of.</i> 27th Edition. To the end of the Session 1 and 2 Geo. V. (1911). 2 vols.	10s. 6d.
<i>Interregnum, 1642-1660. Acts and Ordinances of the.</i> In 3 vols. (not sold separately)	20s.
<i>Acts of the Parliaments of Scotland, 1424-1707. Revised Edition</i>	10s.
<i>Statutory Rules and Orders</i> other than those of a Local, Personal, or Temporary Character. Issued in 1890 to 1911	10s. each
<i>Statutory Rules and Orders revised, in force on Dec. 31, 1903.</i> Vols. I. to XIII.	10s. each
<i>Statutory Rules and Orders in force on 31st December, 1909.</i> Index to	10s.
HISTORICAL MANUSCRIPTS. Reports of the Royal Commissioners. In course of issue.	
LABOUR STATISTICS, UNITED KINGDOM, 1910-11. [Cd. 6228.]	1s. 6d.
FACTORIES AND WORKSHOPS. Report of Chief Inspector, 1911. [Cd. 6239.]	2s. 3d.
LIFE SAVING APPLIANCES AND SAFETY OF LIFE AT SEA. Report of the Advisory Committee respecting Regulations. [Cd. 6353.]	2s.
Do. Rules, H.C. 442	2d.
LICENSING STATISTICS, ENGLAND AND WALES, for the year 1911. [Cd. 6337.]	2s. 6d.
STATISTICAL ABSTRACT, UNITED KINGDOM, 1897 to 1911. [Cd. 6396.]	1s. 6d.
NAVIGATION AND SHIPPING, UNITED KINGDOM. Annual Statement for 1911. [Cd. 6398.]	3s.
MINERS' SAFETY LAMPS, TESTING OF. Report of Departmental Committee on. [Cd. 6387.]	2d.
ISOLATION HOSPITALS. Report. [Cd. 6342.]	1s. 3d.
METALLIFEROUS MINES AND QUARRIES, ROYAL COMMISSION ON. Evidence, Appendices, and Index. [Cd. 6390.]	3s. 3d.
STATISTICAL TABLES, BRITISH COLONIES, 1910. [Cd. 6400.]	6s. 6d.
CHANGES IN WAGES AND HOURS OF LABOUR, 1911. Report. [Cd. 6471.]	3d.
DIVORCE AND MATRIMONIAL CAUSES, ROYAL COMMISSION ON. Majority and Minority Reports. [Cd. 6478.]	1s. 3d.
Do. do. Evidence. [Cd. 6479, 6480, 6481.]	14s. 3d.
Do. do. Appendices. [Cd. 6482.]	1s. 10d.
WORKMEN'S COMPENSATION STATISTICS, 1911. [Cd. 6493.]	8d.
FOREIGN IMPORT DUTIES, 1912. [Cd. 6475.]	4s. 10d.
COLONIAL IMPORT DUTIES, 1912. [Cd. 6476.]	3s. 3d.
PROFIT SHARING AND CO-PARTNERSHIP, UNITED KINGDOM. [Cd. 6496.]	8d.
LINEN AND OTHER MAKING-UP TRADES OF THE NORTH OF IRELAND. Report of Committee on Conditions of Employment; with Evidence and Index. [Cd. 6509.]	1s. 6d.
STATISTICAL ABSTRACT FOR THE COLONIES FROM 1897 to 1911. [Cd. 6533.]	1s. 10d.

TWELFTH
ANNUAL GENERAL REPORT
OF THE DEPARTMENT,
1911-12.

Presented to both Houses of Parliament by Command of His Majesty.



LONDON:

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

To be purchased, either directly or through any Bookseller, from

E. PONSONBY, LTD., 116 GRAFTON STREET, DUBLIN; or
WYMAN AND SONS, LTD., FETTER LANE, E.C., & 32 ABINGDON ST., LONDON, S.W.; and
54 ST. MARY STREET, CARDIFF; or
H.M. STATIONERY OFFICE (SCOTTISH BRANCH), 23 FORTH STREET, EDINBURGH;
or from the Agencies in the British Colonies and Dependencies,
the United States of America, the Continent of Europe and Abroad of
T. FISHER UNWIN, LONDON, W.C.

PRINTED BY

BROWNE AND NOLAN, LTD., NASSAU STREET, DUBLIN.

1913.

[Cd. 6647.]

Price Two Shillings and Twopence.

DUBLIN CASTLE,

22nd February, 1913.

SIR,

I have to acknowledge the receipt of your letter of the 20th instant, forwarding, for submission to His Excellency the Lord Lieutenant, the Twelfth Annual General Report of the Department of Agriculture and Technical Instruction for Ireland, for the Year 1911-12.

I am,

Sir,

Your obedient Servant,

J. B. DOUGHERTY.

THE SECRETARY,

Department of Agriculture
and Technical Instruction,
Dublin.

TABLE OF CONTENTS.

	Page
INTRODUCTION,	1
PART I.—ADMINISTRATION AND FUNDS.	
COUNCIL OF AGRICULTURE AND BOARDS—	
The Council of Agriculture,	2
The Agricultural Board,	3
The Board of Technical Instruction,	4
The Consultative Committee of Education,	6
FUNDS OF THE DEPARTMENT—	
The Parliamentary Vote,	6
The Endowment Fund,	7
The General Cattle Diseases Fund,	8
ADMINISTRATION OF THE ENDOWMENT FUND—	
The Endowment Fund,	8
Funds for Agricultural Purposes,	9
Funds for Technical Instruction,	10
Funds for Fishery Purposes,	11
Sea and Coast Fisheries Fund,	12
CENTRAL INSTITUTIONS—	
The Royal College of Science,	12
Other Central Institutions,	14
The Geological Survey of Ireland,	16
MISCELLANEOUS—	
Foot and Mouth Disease,	16
Development Act,	17
Agricultural Organisation,	19
Irish Creameries and Dairy Produce Bill,	20
Advisory Committee on Dairying,	20
Departmental Committee on Irish Inland Fisheries,	21
Agricultural Credit,	22
Irish Minerals and Raw Materials,	23
Grants of Books to Village Libraries,	23
PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS, 1911-12.	
AGRICULTURE—	
AGRICULTURAL INSTRUCTION,	
Royal College of Science, Agricultural Faculty,	27
Albert Agricultural College, Glasnevin,	28
Agricultural Stations,	29
Agricultural Classes and Schools,	31
Agricultural Schools for Girls,	38
Munster Institute, Cork,	39
Ulster Dairy School, Cookstown,	39
School of Rural Domestic Economy,	39

PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS,
1911-12—*continued*.

AGRICULTURE—*continued*.

	Page
Scheme of Instruction in Agriculture,	40
Agricultural Overseers in Congested Districts,	42
Special Demonstration Plots in Congested Districts,	43
Potato Spraying in Congested Districts,	44
Sale of Implements,	45
Veterinary Dispensaries in Congested Districts,	45
Poultry Keeping,	47
Butter Making,	50
Horticulture and Bee-keeping,	50
Bee Pest Prevention (Ireland) Act, 1908,	51
Prizes for Cottages and Small Farms,	52
Prizes for Tillage,	53
Pioneer Lectures,	54
IMPROVEMENT OF LIVE STOCK,	54
Horse Breeding,	54
Asses,	60
Cattle Breeding,	60
Swine Breeding,	66
Sheep Breeding,	68
Subsidies to Shows,	69
SPECIAL INVESTIGATIONS,	70
Field Experiments,	70
Flax Growing,	71
Early Potato Growing,	73
Sugar Beet,	74
Barley Growing,	74
Wheat,	75
Oats,	76
Fruit as a Farm Crop,	76
Tobacco,	77
Poultry Fattening,	78
Marketing of Fruit,	79
Marketing of Eggs,	79
Improvement in the Management of Creameries,	80
Winter Dairying,	82
Registration of Dairy Cattle,	82
Cow Testing Associations,	83
Cheese Making Experiments,	84
Live Stock Feeding Experiments,	84
Dead Meat Trade,	85
Analysis of Spraying Materials,	86
Fertilisers and Feeding Stuffs Act, 1906,	86
American Gooseberry Mildew and Black Currant Mite (Ireland) Order, 1908,	87
Black Scab in Potatoes (Ireland) Order, 1908,	88
Weeds and Agricultural Seeds (Ireland) Act, 1909,	88
Seed Testing Station,	91
Investigation of Potato Diseases,	94
Forestry,	94
Loans for Agricultural Purposes,	97

TECHNICAL INSTRUCTION—

Schemes under Local Authorities,	98
Secondary Schools,	103

PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS,
1911-12—*continued*.

TECHNICAL INSTRUCTION— <i>continued</i> .	Page
REPORTS OF INSPECTORS,	104
THE TRAINING OF TEACHERS,	136
Summer Courses, 1911,	136
Teachers—Science and Art,	138
" Commercial Subjects,	139
" Manual Instruction,	139
" Domestic Economy,	139
" National School Teachers,	139
CENTRAL INSTITUTIONS—	
Royal College of Science and Metropolitan School of Art,	141
Irish Training School of Domestic Economy,	141
Kilbarney School of Housewifery,	142
SCHOLARSHIPS,	142
Scholarships for Boys,	143
Scholarships at Residential Schools of Domestic Training,	145
Local Exhibitions,	145
Senior Science Scholarships,	146
Senior Art Scholarships,	146
Industrial Scholarships,	146
Commercial Scholarships,	147
Crochet Work and Sprigging Scholarships,	147
FISHERIES—	
Sea Fisheries,	147
Mackerel Curing,	148
Government Brand for Cured Herrings,	148
Casualties,	148
Loans,	148
Net Mending,	149
Sale of Fish in Inland Towns,	149
Development Grant,	149
Marine Superintendence,	149
Piers and Harbours,	149
Fishery Investigation,	150
Salmon Fisheries,	150
STATISTICS AND INTELLIGENCE,	151
VETERINARY,	157
TRANSIT AND MARKETS—	
TRANSIT OF ANIMALS,	160
TRANSIT OF PRODUCE,	160
Butter,	161
Eggs,	162
Fruit,	163
Fish,	163
Cream,	163
Potatoes,	163
Fresh Meat,	164
DELAYS AND DAMAGE IN TRANSIT,	165
RAILWAY RATES,	165

**PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS,
1911-12—continued.**

TRANSIT AND MARKETS—continued.		Page
SALE OF FOOD AND DRUGS ACTS,		167
Administration of the Acts,		167
Samples taken by Officers of Local Authorities,		168
Department's Officers,		170
Water in Butter,		170
Labelling of Margarine,		171
Refusal to Sell,		171
Margarine—Registration of Premises,		172
Inspection of Margarine Registers,		172
Registration of Butter Factories,		173
Inspection of Butter Factories,		173
Samples taken in Butter Factories,		174
Special Inspections,		174
Approval of names for Margarine,		175
Samples taken at Irish Ports,		175
The Sale of Milk Regulations, 1912, England and Wales,		175
Analysts,		176
 MERCHANDISE MARKS ACTS—		
Misleading Descriptions—Butter,		176
Eggs,		177
Linen,		177
Lace,		178
Meat,		178
Champagne Cider,		178
Regulations,		179
ACTION TAKEN BY THE DEPARTMENT'S STAFF IN GREAT BRITAIN,		179
MARKETS AND FAIRS (WEIGHING OF CATTLE) ACTS, 1887 AND 1891,		182
APPENDICES,		[2]

TWELFTH ANNUAL GENERAL REPORT

OF THE

Department of Agriculture and Technical Instruction
for Ireland.

TO HIS EXCELLENCY

JOHN CAMPBELL, EARL OF ABERDEEN,
&c., &c., &c.,

LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR
OF IRELAND.

MAY IT PLEASE YOUR EXCELLENCY,

I have the honour, on behalf of the Department of Agriculture and Technical Instruction for Ireland, to submit their Twelfth Annual General Report.

The Annual Report of the Department includes operations up to the close of the agricultural year, as it has been found more convenient to adopt this arrangement than to limit the Report to the period of the financial year.

The Report has been divided as follows :—

Part I.—ADMINISTRATION AND FUNDS.

1. Council of Agriculture and Boards.
2. Funds of the Department.
3. Administration of the Endowment Fund.
4. Central Institutions.
5. Miscellaneous.

Part II.—DETAILS OF THE DEPARTMENT'S OPERATIONS.

1. Agriculture.
2. Technical Instruction.
3. Fisheries.
4. Statistics and Intelligence.
5. Veterinary.
6. Transit.

PART I.—ADMINISTRATION AND FUNDS.

1—COUNCIL OF AGRICULTURE AND BOARDS.

By Section 27 of the Agriculture and Technical Instruction (Ireland) Act, 1899, the members of the COUNCIL OF Council of Agriculture and of each Board AGRICULTURE. established by the Act hold office for terms of three years. The term of office of the fourth Council of Agriculture, which was constituted in 1909, expired on 31st March, 1912. In December, 1911, the Department issued to the County Councils and County Borough Councils copies of the regulations for the appointment of members of the new Council and Boards. The elections were all completed by the end of March, 1912, and the new Council was fully constituted early in April. A list of the members of the new Council will be found in the Appendices.

The first meeting of the new Council was held on the 22nd May, 1912, in the Lecture Theatre of the Royal Dublin Society, Leinster House, Dublin, where, through the courtesy of the Society, the necessary accommodation was placed at the disposal of the Department. The principal business transacted at this meeting was the election of eight members to serve on the Agricultural Board and of four members to serve on the Board of Technical Instruction. For the purpose of the election the Council resolved itself into four Provincial Committees, which sat separately, each Committee appointing two persons as members of the Agricultural Board and one person as member of the Board of Technical Instruction. The names of the members of the new Boards will be found below.

Among the more important subjects discussed at the first meeting of the new Council were the following:—Cow-testing associations; the Weeds and Agricultural Seeds (Ireland) Act, 1909; live stock insurance; investigation of diseases of animals; afforestation.

There were two further meetings of the Council of Agriculture in 1912. One took place on the 17th September, and was called specially to consider the situation arising out of the outbreaks of Foot and Mouth Disease in Ireland. At this meeting the following resolution was adopted:—

“That this Council fully recognises the importance of the most thorough measures being taken for the suppression of foot-and-mouth disease, and

the restoration to Irish live stock of the clean bill of health which it has enjoyed without interruption for the past twenty-seven years. They consequently desire to support the Department in such measures as they find it necessary to take towards this end, and they bespeak the continuance of the co-operation which the farmers and all concerned have hitherto given to these measures in spite of the loss and difficulty which such restrictions have involved.

"At the same time the Council are of opinion that these measures have now been completely effective in eradicating the disease from the centres in which it occurred in the counties of Dublin, Meath, and Louth; and that there is no further justification for the restrictions which are still placed upon the shipments of live stock, whether fat or store animals, to British markets from these counties.

"Furthermore, that as in the whole of Munster and Connacht, and the greater part of Ulster, no foot-and-mouth disease at all appeared, there is no justification whatever for any restriction upon the shipment of fat cattle or stores from these parts of the country; and as these restrictions inflict most grievous injury and loss amounting in its proportions to a national calamity, the Council urge upon the Government to remove them and at least to accord the same facility of movement and markets for healthy Irish live stock—fat and store—coming from non-infected areas as those allowed to live stock from similar areas in Great Britain, so as to permit the resumption of our trade upon its normal conditions without further delay."

At this meeting the Council also discussed the relation of the Dead Meat Trade to the Fat Stock Trade with special reference to the crisis that had arisen in the live stock industry owing to the outbreak of disease.

The third meeting of the new Council was held on the 4th December, 1912, when the following among other matters were under consideration:—Proposals for legislation to prevent the use of unsuitable stallions for stud purposes; tuberculosis in relation to the cattle industry; the system of agricultural training; and the horse-breeding scheme in County Meath.

As in the case of the first meeting, the second and third meetings were held in the Lecture Theatre of the Royal Dublin Society by kind permission of the Society. A summary of the proceedings of each meeting of the Council, together with the Vice-President's Address, was published in the Department's JOURNAL.*

The term of office of the Agricultural Board, which was constituted in 1909, terminated on the 31st March, 1912. The appointment of representatives on the Board by the Provincial Committees of the Council of Agriculture

*[See JOURNAL, Vol. XII., No. 4, p. 649; Vol. XIII., No. 1, p. 3; Vol. XIII., No. 2, p. 217.

was made, as has been stated, at the meeting held on the 22nd May, 1912, and the new Board was constituted as follows :—

Name and Address	By whom appointed
Clark, Alexander L., J.P., Moyola Lodge, Castledawson, Co. Londonderry,	The Department.
Dale, Alderman Henry, J.P., Riverview House, Sunday's Well, Cork,	The Department.
Daly, Very Rev. Canon, D.D., P.P., Lavagh, Ballymote, Co. Sligo,	Connacht Provincial Committee.
Downes, Robert, Russelstown, Mullingar,	Leinster Provincial Committee.
Everard, Colonel Sir Nugent T., Bart., H.M.L., Randlestown, Navan, Co. Meath,	The Department.
Gore-Booth, Sir Josslyn, Bart., D.L., Lissadell, Sligo,	The Department.
Healy, His Grace the Most Rev. John, D.D., Lord Archbishop of Tuam, St. Jarlath's, Tuam, Co. Galway,	Connacht Provincial Committee.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross, Bishop's House, Skibbereen, Co. Cork,	Munster Provincial Committee.
M'Cance, John S. F., J.P., Woodbourne, Dunmurry, Co. Antrim,	Ulster Provincial Committee.
Murnaghan, George, J.P., Lisanelly House, Omagh, Co. Tyrone,	Ulster Provincial Committee.
O'Gorman, David Leo, Janeville, Fermoy, Co. Cork,	Munster Provincial Committee.
O'Neill, Patrick J., J.P., Kinsealy House, Malahide, Co. Dublin,	Leinster Provincial Committee.

The Agricultural Board meet at the Offices of the Department, Upper Merrion Street, Dublin. The funds controlled by the Board are set forth on page 8. The schemes and operations of the Department that are explained in detail in the section of the report which deals with Agriculture have all been undertaken with the advice and concurrence of the Board.

THE BOARD OF TECHNICAL INSTRUCTION. The appointment of members of the new Board of Technical Instruction was also completed on the 22nd May, 1912. The Board as then constituted consisted of the following members :—

Name and Address	By whom appointed
Barbour, Frank, Hilden, Lisburn, Co. Antrim,	Ulster Provincial Committee.
Clancy, Most Rev. John, D.D., Lord Bishop of Elphin, St. Mary's, Sligo,	Connacht Provincial Committee.

Technical Instruction Board—*continued.*

Name and Address	By whom appointed
Crozier, James, J.P., V.S., Montpelier House, Phoenix Park, Dublin.	Dublin County Borough Council.
Dickson, Alexander, 15 Parliament Street, Dublin.	Dublin County Borough Council.
Dunn, Christopher J., J.P., Hotel Metropole, Cork.	The Department.
Evans, Rev. Henry, D.D., M.R.I.A., F.I.H., St. Helen's, Blackrock, Co. Dublin.	Commissioners of National Education.
Finlay, Rev. T. A., M.A., 35 Lower Leeson Street, Dublin.	Leinster Provincial Committee.
Henderson, Sir James, J.P., D.L., Oakley House, Windsor Park, Belfast.	The Department.
Johnston, Sir John Barr, J.P., Crawford Square, Londonderry.	Londonderry County Borough Council.
Macartney, William, J.P., 33 Cliftonville Road, Belfast.	Belfast County Borough Council.
McClolland, John A., M.A., D.Sc., F.R.S., Rostrevor, Orwell Road, Rathgar, Co. Dublin.	The Department.
McDonogh, Martin, J.P., Galway.	The Department.
Mercier, Alderman Samuel T., J.P., 2 Mount Clifton, Cliftonville Road, Belfast.	Belfast County Borough Council.
O'Callaigh, Seaghan T., 8 Belvidere Avenue, Dublin.	Dublin County Borough Council.
Power, Thomas, Dungarvan, Co. Waterford.	Munster Provincial Committee.
Ryan, Right Worshipful Councillor Timothy, Mayor of Limerick, 126 O'Connell Street, Limerick.	Limerick County Borough Council.
Sheehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore, Bishop's House, John's Hill, Waterford.	Waterford County Borough Council.
Sisk, Richard, 2 Evergreen Villas, Evergreen Road, Cork.	Cork County Borough Council.
Starkie, William J. M., M.A., Litt.D., LL.D., Tyrone House, Marlborough Street, Dublin.	Intermediate Education Board.
Taylor, Alexander, 131A Donegall Street, Belfast.	Belfast County Borough Council.
Wallace, William, J.P., Greenville, Blackrock, Co. Dublin.	Joint Committee of Councils of the Co. Dublin Urban Districts.

The Department have to record with regret the death in October, 1912, of Most Reverend John Clancy, D.D., Bishop of Elphin. Dr. Clancy was a member of the Board of Technical Instruction since its establishment in 1900, being the representative appointed by the Connacht Provincial Committee of the Council of Agriculture. His Lordship took a deep interest in the promotion of technical instruction, and his valuable services were freely placed at the disposal of the Department

and of the Board. The vacancy caused by his death was filled on the 4th December, 1912, by the appointment by the Con-nacht Provincial Committee of the Council of Agriculture of Mr. James P. MacGuire, of Rooskey, Co. Roscommon.

The Consultative Committee for co-ordinating educational administration, as constituted by Section 23 of the Act of 1899, consists of the Vice-President of the Department as Chairman, and one person appointed by each of the following bodies:—The Commissioners of National Education; the Intermediate Education Board; the Agricultural Board, and the Board of Technical Instruction.

The Committee was re-appointed in April, 1912, and at present consists of the following members:—

Name and Address	By whom appointed
Russell, The Right Hon. T.W., P.C., M.P., Vice-President of the Department of Agriculture and Technical Instruction, Dublin,	<i>Ex-officio.</i>
Starkie, William J. M., M.A., Litt.D., LL.D., Tyrone House, Marlborough Street, Dublin,	The Commissioners of National Education.
Filmsay, Rev. T. A., M.A., 35 Lower Leeson Street, Dublin,	The Intermediate Education Board.
McClelland, John A., M.A., D.Sc., F.R.S., Rostrevor, Orwell Road, Rathgar, Co. Dublin,	The Board of Technical Instruction.
Gill, T. P., Department of Agriculture and Technical Instruction, Dublin,	The Agricultural Board.

2.—FUNDS OF THE DEPARTMENT.

(a.) *Parliamentary Vote.*

In the Parliamentary Vote for the Department for 1911-12 provision was made for the salaries and other expenses in connection with the institutions and officers transferred from other Departments under Section 2 of the Agriculture and Technical Instruction (Ireland) Act of 1899, as well as for the salaries and expenses of officers appointed since 1st April, 1900. The Vote also contained the following Grants-in-Aid:—Cattle Pleuro-Pneumonia Account, including the grant for swine fever and rabies work, £10,200; Congested Districts Board, £169,750; provision for agricultural purposes under section 15 of the Act of 1899 and Section 49 of the Irish Land Act, 1909, £37,000 (this sum forms part of the Endowment Fund); provision for the purchase of specimens for the National Museum of Science and Art, £2,300; books for the National Library of Ireland, £1,300; and

apparatus and equipment for the Royal College of Science, £13,875. Provision was also made for tobacco growing experiments, £6,000; for forestry operations, £6,000; and from the Development Fund for the improvement of horse-breeding, £10,000; for the purchase, etc., of areas for afforestation, £17,000; for purchase of Dredging Plant, £4,250; for Agricultural Research and Advisory work, £2,400. These sums were duly received from the Development Fund Account and expended, except in the case of afforestation purchases, where only £500 was received, and £472 19s. 2d. expended, as the vendors of the lands offered were unable to prove clear title within the period.

The Parliamentary Vote also contained the grants for Science and Art Instruction in Ireland, payable to schools which adopt the Department's programme for Experimental Science, Drawing, Manual Instruction, and Domestic Economy. The provision made for these purposes was £57,750, an increase of £4,500 on the corresponding provision for the previous year.

The expenditure in respect of the institutions maintained from the Parliamentary Vote of the Department during the year 1911-12 was as follows:—

Royal College of Science,	£20,840
National Museum of Science and Art, . .	13,655
National Library of Ireland,	5,542
Metropolitan School of Art,	4,628
Royal Botanic Gardens.	4,829
	<hr/>
	£49,494

The Geological Survey of Ireland was transferred to the Department in April, 1905, from the Board of Education, England. The expenditure on the survey in 1911-12 was £2,426.

(b.) *Endowment Fund.*

During the year ended 31st March, 1912, the whole of the Department's Annual Endowment Fund provided under the Agriculture and Technical Instruction (Ireland) Act, 1899, viz., £166,000, was duly received, together with a further annual sum of £5,000 under the terms of the Agriculture and Technical Instruction (Ireland) Act, No. 2, 1902. There was also received a contribution of £7,000 from the Ireland Development Grant, ear-marked for the purposes of Technical Instruction, and £19,000 under Section 49 of the Irish Land Act, 1909, in respect of the agricultural work of the Department in the Congested Districts. The amount received as interest arising out of securities held by the Department, and from moneys on deposit in the Bank of Ireland, was £8,499, and the interest received from loans for bulls, stallions, agricultural banks, etc., was £714.

(c.) *The General Cattle Diseases Fund.*

The General Cattle Diseases Fund was formed under the Contagious Diseases (Animals) Act of 1878 by assessment on the several Poor Law Unions in Ireland, mainly for the purpose of recouping to local authorities one-half of the expenditure incurred by them under the Diseases of Animals Acts, and by that means lessening the burden which might otherwise press unduly on particular localities, owing to the prevalence therein of contagious diseases of animals. It is also drawn upon to supplement the annual Grant-in-Aid of the Cattle Pleuro-Pneumonia Account in any year in which that grant proves insufficient to meet the expenditure of the central authority in dealing with pleuro-pneumonia, foot and mouth disease, rabies, and swine fever.

The Fund is replenished by assessments on the several counties and county boroughs in proportion to the net annual value of property therein. The total amount which may be levied on the several contributing bodies for the purposes of the Fund is limited by the Diseases of Animals Act of 1894 to a sum which, taken with any money carried to the Cattle Plague Account before the 30th September, 1878, is equivalent to a poundage of 8d. in the pound; and no larger sum may be levied at any one time than the equivalent of $\frac{1}{2}$ d. in the pound. Since the inception of the Fund a sum equivalent to a poundage rate of 7d. in the pound has been levied in twenty-seven assessments, the last of which was dated the 17th January, 1912. An assessment at the rate of $\frac{1}{2}$ d. in the pound now yields approximately £16,400, and this sum would cover the normal expenditure, exclusive of expenditure on swine fever work in excess of the Parliamentary Grant, for a period of about eighteen months.

A proportion of the fines recovered in prosecutions for offences under the Diseases of Animals Acts is also carried to the credit of the General Cattle Diseases Fund, and the amount thus realised covers certain miscellaneous expenses of the central authority, such as the expenses incurred in the examination of carcases washed ashore, etc., with which the Fund is also chargeable under Section 72 (4) of the Diseases of Animals Act of 1894.

3.—ADMINISTRATION OF THE ENDOWMENT FUND.

The Department's Endowment Fund for the year 1911-12 consisted of an annual income of £197,000 together with interest arising from loans and securities (details will be found on page 7). From this income a sum of £62,000 was set aside for the purposes of technical instruction, and £10,000 for sea fisheries. A provision of about

£1,000 a year had also to be made for the payment of the superannuation allowances of certain persons formerly employed under the Commissioners of National Education, and for the travelling expenses of members of the Council of Agriculture, and of the two Boards established by the Act of 1899.

When the sums mentioned had been set aside for these purposes, the balance, amounting to £124,000, constituted the annual sum applicable for "the purposes of agriculture and other rural industries, and sea fisheries." In addition to this annual income, certain capital sums, amounting in all to £204,906, were placed at the disposal of the Department under Section 15 (e) and (g) of the Act of 1899. These sums and the unexpended balances of the annual income of the Endowment Fund during the initial years of the Department's existence were invested in Government securities. The nominal or face value of the securities held on 31st March, 1912, including £20,000 Consols transferred from the Board of Works to the Department in April, 1904, in respect of the Sea and Coast Fisheries Loan Fund, was £246,446, and their cash value was £206,035. A sum of £15,343 was on deposit in the Bank of Ireland, and there was a cash balance of £17,410 to credit of the Fund. The total assets of the Fund on 31st March, 1912, amounted to £238,788.

The liabilities in respect of sums specifically ear-marked under Section 16 of the Act of 1899 were as follows:—For technical instruction in the six county boroughs, £41,547; for technical instruction in urban and rural districts, £4,294; for extension of special schemes of technical instruction, £9,188; for sea fisheries, £10,222; for the sea and coast fisheries loan fund, £8,077; steam cruiser and dredger replacement funds, £10,213; and for the buildings and equipment of the Munster Institute an unexpended balance of £1,033 out of £10,000 provided under the Act of 1899. The total amount of these liabilities was, therefore, £84,574 on 31st March, 1912.

Deducting the liabilities from the assets, there remained a sum of £154,214 available for the purposes of agriculture and other rural industries and sea and inland fisheries. The latter sum has been allocated with the concurrence of the Agricultural Board, for various undertakings, such as the purchase of additional land in connection with the agricultural colleges and stations of the Department, the building and equipment of agricultural schools, loans to agricultural credit societies, loans for the purchase of fencing materials, the purchase of bulls and stallions, the purchase of agricultural implements, the erection

of village halls, flax scutching mills, etc.; agricultural work in conjunction with county committees, marine works, and the protection and development of sea and inland fisheries.

The net expenditure on the agricultural side of the Department's work in 1911-12, including grants of £10,500 for the purpose of providing instruction in manual work and domestic economy in rural districts, and £2,000 for dredging operations, was £150,462. The details of the expenditure are shown in the Appendices, pages [10]-[11].

Under Section 16 (1) (c) of the Agriculture and Technical Instruction (Ireland) Act of 1899, the annual

FUNDS FOR
TECHNICAL
INSTRUCTION.

sum of £55,000, ear-marked for the purposes of technical instruction, is to be divided into two parts, one part of which is distributable, in proportion to their respective populations, among the county boroughs in aid of approved schemes of technical instruction, and the other part is applicable to schemes of Technical Instruction elsewhere than in county boroughs, and for certain other purposes mentioned in the Act, such as the collection of information for the purposes of technical instruction.

At the first meeting of the new Board of Technical Instruction which was held on the 31st May, 1912, the question of the fifth triennial division of the funds was considered. The Board unanimously concurred in the Department's proposal that the arrangements made in respect of the fourth triennial period should be renewed for the fifth triennial period. Accordingly the allocation of funds for the three years ending 31st March, 1915, is as follows:—

For technical instruction in county boroughs	£26,000.
For technical instruction elsewhere than in county boroughs, and for central purposes	£29,000.

The Board, therefore, control the expenditure of an annual sum of £29,000, which is applicable for technical instruction elsewhere than in county boroughs, and for certain central purposes. The balance of the £55,000, viz., £26,000, allocated, with the concurrence of the Board, for technical instruction in the six county boroughs, is applied in aid of schemes in these boroughs subject to the approval of the Department alone. Out of the sum of £29,000 referred to, the Department, with the concurrence of the Board, set aside an annual sum of £4,000 for central purposes, e.g., for Senior Scholarship schemes, provision for training teachers, etc. The remaining £25,000 is distributed in aid of approved schemes of technical instruction in urban and county districts. Details of these schemes will be found in Part II. of the present Report, under the head of "Technical Instruction."

The Agricultural Board allocate each year a sum of £10,500

out of the funds administered with the concurrence of that Board, for Manual Instruction and Domestic Economy Classes in rural districts. Such classes are regarded as part of the general scheme of agricultural education, but, for administrative reasons, the Department have hitherto found it convenient to administer this sum with the concurrence of the Board of Technical Instruction. Classes in lace, crochet, and shirt-making, and other rural industries, are also financed from the moneys controlled by the Agricultural Board, the amount voted in 1911-12 for these special purposes being £3,000.

The grant in aid of technical instruction for 1911-12, commonly known as the "Equivalent Grant," was duly received from the Ireland Development Grant, and amounted to £7,000. This sum will in future years be merged in the Parliamentary Vote for annual grants to schools and classes of science and art and technical instruction.

The total of the sums available from the Endowment Fund in 1911-12 for technical instruction in non-agricultural subjects was £73,444,* exclusive of the balance of £67,065 brought forward from the year 1910-11. The expenditure was £85,480, of which £28,301 was paid to the county boroughs. The amount of the balance carried forward to the year 1912-13 was £55,029, and comprised £41,547, accrued in respect of technical instruction schemes in county boroughs, and £13,482 ear-marked, as stated above, for schemes in urban districts and the extension of special schemes, such as the establishment of trade preparatory schools, special courses of instruction for masters and foremen in trades, and summer courses for teachers of elementary science, drawing, manual instruction, and domestic economy.

Under Section 16 (d) of the Act a provision of £10,000 is to be made each year for the purposes of sea fisheries. This sum was supplemented in 1911-12 by a grant of £2,000 for dredging operations from the funds controlled by the Agricultural Board.

The total sum available for these purposes in 1911-12, including the balance carried forward from 1910-11 and sundry receipts, was £32,963. The gross expenditure was £22,741, of which £1,482 was spent on marine works and dredging carried out at Arklow, Ballaghaline and Tramore. Further information regarding these and other marine works, the patrol of the fishing grounds, and the investigations carried on at the marine laboratory and oyster beds at Ardfry, the cost of which is defrayed from this fund, is given in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

* This amount does not include the provision of £57,750 made in the Parliamentary Vote, as stated on page 7, for grants to schools and classes of science and art and technical instruction. The distribution of these grants is shown on pages [176]-[209.] of the Appendices.

The portion of the Sea and Coast Fisheries Fund reserved by the Purchase of Land (Ireland) Act, 1891, for expenditure elsewhere than in congested districts counties, which remained vested in the Commissioners of Public Works, was transferred to the Department under an Order in Council dated 24th March, 1904, in accordance with the terms of Section 15 (c) of the Agriculture and Technical Instruction (Ireland) Act, 1899.

The Sea and Coast Fisheries Fund was the residue of a sum collected by public subscription for the relief of distress in Ireland in the year 1822. This sum was vested in trustees known as the "Trustees to Aid Sea and Coast Fisheries of Ireland." By the Act 47 and 48 Vic., c. 21, the fund was transferred to the Commissioners of Public Works, who were authorised to make fishery loans therefrom to such persons, and upon such security, as the Inspectors of Irish Fisheries should recommend. By the Purchase of Land (Ireland) Act, 1891 (54 and 55 Vic., c. 48), the fund was transferred to the Congested Districts Board, save £20,000, which was reserved for the purpose of loans in non-congested districts under the same terms as obtained before the passing of that Act.

By the Agriculture and Technical Instruction (Ireland) Act, 1899, this sum of £20,000—or what it was then represented by in cash, investments and outstanding loans—was placed at the disposal of the Department. It was not, however, actually transferred until 1st April, 1904, when the Department received from the Commissioners of Public Works £1,521 19s. 6d. in cash, £20,000 in Consols, and promissory notes to the amount of £7,700, inclusive of arrears and irrecoverable balances.

During the year ended 31st March, 1912, ninety-three applications for new loans were favourably considered by the Department, and a sum of £14,303 was issued for the purchase and repair of fishing boats and gear. The manner in which these loans are repaid continues to be satisfactory. The details of the transactions are published in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

4.—CENTRAL INSTITUTIONS.

The forty-third Annual Report of the Council of the Royal College of Science will be found in the Appendices, page [235]. During the Session 1911-12, the work of the College was conducted in the new buildings, Upper Merrion Street, to which all the apparatus and general equipment of the old College in Stephen's Green had been removed during the months of August and September, 1911.

The number of students attending the College during the Session was 141, of whom 101 were Associate Students and 38 were non-Associate Students. These included 3 Royal Scholars, 15 Science Scholars, 34 Agricultural Scholars (including 1 in Horticulture, 1 in Forestry, and 1 in Creamery Management) and 15 Teachers-in-Training. In addition there were 4 Local Exhibitioners, 1 Special Research Student, and 1 Post-Graduate Student, to whom a Research Studentship had been awarded. At the end of the Session 29 students were awarded the Associate Diploma of the College—10 in the Faculty of Agriculture, 1 in the Faculty of Agriculture (Horticulture), 7 in the Faculty of Engineering, 3 in the Faculty of Applied Chemistry, and 8 in courses for Teachers-in-Training, viz.:—1 in Chemistry Section, 1 in Physics Section, and 6 in the Natural Science Section.

The College has again been utilised as the chief centre for the short Summer Courses of instruction which the Department organise each year mainly for the further training of teachers working under their Programme of Experimental Science, Drawing and Manual Instruction for Day Secondary Schools. In 1912, these Summer Courses were held at 20 centres, with an attendance of 548. Of this number 325 attended at the Royal College of Science.

The development of Geography on modern lines under the Department's scheme for secondary schools led to the holding of courses on the branches dealt with in both the first and the second year of the syllabus. Professor A. J. Herbertson of Oxford undertook the general conduct of these classes, assisted in the lecturing work by Professor Cole, Professor Swain and Mr. A. Williamson.

Among the other Summer Courses held in the College may be mentioned three in Physics, under the charge of Professor Brown, assisted in the lecturing work by Dr. F. E. Hackett, and Messrs. W. J. Lyons and R. G. Allen; two in Chemistry, under Professor Morgan, assisted in the lecturing work by Mr. A. O'Farrelly and Dr. J. H. Pollock; and two in Rural Science, conducted by Professors Carpenter and Cole and Mr. D. Houston.

The use made of the College laboratories for research in general is apparent from the detailed report printed on page [287] of the Appendices, and must be regarded as eminently satisfactory.

The new buildings have provided much needed space for many of the branches of the College work, notably in the faculties of Chemistry and Agriculture. The Engineering building is in process of completion, and a carefully selected series of machine tools has already been installed.

A scheme for a four-years' curriculum in all subjects has been drawn up, and all the students in the Faculty of Agriculture, and a large number of those in other faculties, have arranged to follow this extended scheme of study. All new entrants, who

desire to obtain the Diploma of the College, must take the four years' course. Certain hours have been set apart in this curriculum for such subjects as Modern Languages, Economics, and the Theory of Education, so as to encourage a wider training among those whose main work must be of a technical character.

In the Art and Industrial Division many very rare and valuable additions have been made to the
 NATIONAL MUSEUM several sections, both by gift and purchase. These include an old seventeenth-century staircase from a house at Tallaght ; a Court cupboard of the same era ; an Irish Chippendale card table ; a large collection of coins bequeathed by the late Mr. Murphy of Newry ; a large selection of porcelain bequeathed by the late Mr. R. Gumbleton of Queenstown ; several pieces of silver plate of Dublin workmanship, and many other interesting objects. Many loan collections have been on exhibition during the year.

The Directors of the Bank of Ireland, having acquired the Georgian house, No. 40 St. Stephen's Green (Tracton House), for purposes of a branch office, kindly agreed to present to the Museum the drawing-room, known as "The Apollo Room," which is an excellent example of the elaborate interior decoration of Dublin houses of the eighteenth century. The Department accepted the offer and made arrangements to have the room removed, and re-erected in the Museum. The difficult work of taking down the elaborate stucco ceiling and frieze, together with the wall-panelling, doors, and windows, and setting them up without injury to the delicate modelling of the plaster ornament, has been most successfully carried out by the Museum staff. The original marble mantelpiece, which had been removed from the house before the Bank took possession, has fortunately been secured, and the completed room, furnished in the style of the Georgian period, forms an important and interesting feature in the Museum Collections.

In the Natural History Division the re-arrangement of the lower room has been completed. Several important additions have been made to the collections during the year. These include a fine specimen of the Irish Wolf Hound ; a Tarpon ; and a Gharial.

The Bird Group cases have also been added to during the year.

In the Botanical Section much progress has been made. The arrangement of the Irish lichens from Clare Island has been completed, and a valuable collection of Irish fossil ferns acquired ; many other additions have been made to the collections by gift and purchase.

To the Mineralogical section considerable additions have been made. An interesting collection of specimens of Irish

coal has been added, and the collection of road metals in use in Ireland increased.

The Irish antiquities collection has been considerably increased by purchase, gifts and transfers from the Royal Irish Academy. Some recent finds from the Counties Fermanagh, Limerick, Meath, Armagh, and Dublin can be seen among these additions.

The arrangement of the Crypt is now finished. Many objects of great interest will be found here, including the valuable collection of the Royal Society of Antiquaries of Ireland which has up to recently been in Kilkenny, and has now been deposited on loan in the Museum.

It is gratifying to observe that there has been a large increase in the number of students making daily use of the Museum, and that the Circulation Collections have been in much request during the year.

The attendances of readers during the year were 196,748, a decrease of 11,753 on 1910-11; when, however, the working year was seven days longer. The volumes added to the Library number 4,865. The Author Catalogue for 1908 was issued; that for 1909 was advanced in printing; and 1910-11, in one alphabet, advanced in preparation for press. The Subject-Index for 1894-1908 was issued; that for 1904-10 advanced in preparation, with the incorporation of a similar Index for the earlier years of the Library up to 1874. Many important donations have been received—notably from Mr. J. Pierpoint Morgan, and from Mr. E. R. McClintock Dix.

No important building works or structural alterations have been carried out in the garden this year. The conservatories have been maintained in good order, necessary repairs have been effected, and defects in the hot water system remedied. The front of the fern house, No. 1, which had partially subsided was raised and strengthened with strong iron supports. In the grounds several important changes have been made. Considerable addition has been made to the rock work which, however, is not yet completed. The levels of several of the walks were altered and the walks were re-made. Several duplicate trees have been taken down, and also some large trees which were unsound, and were in a dangerous position. Unfortunately the very destructive weevil which attacked the indoor ferns some years ago, and which destroyed half the collection, has spread to the outdoor ferns, and has already done much mischief. All the attacked plants were lifted, and as far as possible cleaned, but many, including some of the best varieties, had to be burnt.

The Metropolitan School of Art has maintained its record of the previous year, having been awarded
 METROPOLITAN during the session 1911-12 a gold medal,
 SCHOOL OF ART. four silver medals, five bronze medals and
 six book prizes in the National Art Competition.

The number of students attending the school during the session was 371. A selection of works by students of the Metropolitan School of Art, together with works by students of the Irish provincial art schools and classes, was exhibited at the Fifth International Art Congress, held at Dresden, in August last. This exhibit was highly appreciated and especial praise was accorded by foreign critics to the enamels, metal work and stained glass submitted by this school. This was the more satisfactory as the exhibits comprised examples of school work from nearly every civilised country in the world.

During the year 1911-12, the Geological Survey of Ireland continued the mapping of areas in North-
 GEOLOGICAL west Ireland on the scale of six inches to
 SURVEY one mile. The memoirs of the country
 OF IRELAND. round Monaghan and Kenmare being out of
 print, the opportunity was taken to examine

the glacial and other superficial deposits of these districts, and to make one or two corrections of the older maps. The manuscript of the revised Monaghan memoir is now complete, and results of considerable interest have been arrived at in the Kenmare area. A number of soils have been examined in connection with the Department's Forestry operations and as types for comparison with other Irish examples. The Ordnance Survey has undertaken the reproduction of the new geological map of Ireland on the scale of one quarter of an inch to one mile.

Particulars regarding the year's work in the Royal College of Science, the National Museum of Science and Art, the National Library, the Metropolitan School of Art, the Royal Botanic Gardens, and the Geological Survey of Ireland are given in the Appendices. The Report of the Board of Visitors of the National Museum and the Royal Botanic Gardens is printed at page [329] and the Report of the Council of Trustees of the National Library at page [340].

5.—MISCELLANEOUS.

In June, 1912, a serious outbreak of Foot and Mouth Disease occurred in the district of Swords, County
 FOOT AND MOUTH Dublin. Stringent measures were at once
 DISEASE. taken to stamp out the disease. Notwithstanding these measures, further outbreaks occurred in Counties Meath, Louth, Kildare, Wicklow, Fermanagh and Westmeath. At the time of writing (November, 1912) the Department have been able to withdraw all restrictions from the affected areas except those relating to the West-

meath outbreak, and there is every reason to hope that in a short time Ireland will again regain her position of complete immunity from the disease, an immunity which she had previously enjoyed for a period of over 28 years. A brief history of the outbreaks, and an account of the measures taken by the Department to suppress the disease will be found in the section of this report which deals with the work of the Veterinary Branch (see page 157). The Department desire here to bear testimony to the cordial co-operation which all those connected with the Irish live stock industry have accorded to their efforts to stamp out the scourge notwithstanding the very severe losses that were in many cases entailed, and the inevitable inconvenience which the restrictive measures necessarily imposed on all concerned in the trade. The Department also desire to express their recognition of the great assistance afforded to them by the Authorities of the Royal Irish Constabulary and of the willing co-operation of all ranks of the force engaged in the affected areas.

During the year under review the Department have been in communication with the Development Commissioners appointed under the Development and Road Improvement Funds Act, 1909, in reference to advances from the Development Fund for various purposes.

Forestry.—As mentioned in the Report for the year 1910-11, an advance of £25,000 has been sanctioned for the acquisition of certain areas for afforestation. Negotiations for the purchase of these areas have not yet been concluded.

Fisheries.—The Department's application to the Commissioners for a grant for the development of fisheries and the improvement of harbour accommodation, etc., which was referred to in the last Report, resulted in a recommendation by the Commissioners that a sum of £50,000 should be placed at the disposal of the Department. The Treasury have, subject to certain conditions, approved of grants out of this sum for expenditure in the following manner: On the construction of a harbour at Helvick, Co. Waterford, specially adapted for a large class of boats fishing off the Irish coast, £19,000; for the improvement of the harbour accommodation at Kilkeel, Co. Down, £20,000; in meeting part of the cost of dredging fishing harbours in cases where local funds are insufficient to meet the full cost of the work, £2,500; for the improvement of oyster fisheries, £1,000; to aid, by way of instruction or otherwise, the Department's scheme for developing fishing from motor driven craft among Irish fishermen, £1,000 out of a possible £3,000. The work at Helvick has been begun; that at Kilkeel has been delayed owing to some discussion on the merits of alternative plans. The other grants are being utilised by the Department for the purposes for which they were made.

Technical and Advisory Work.—As mentioned in last year's Report, an initial grant not exceeding £3,500 from the Develop-

ment Fund, to be followed, subject to certain conditions, by an annual grant not exceeding £5,000, was recommended by the Development Commissioners and sanctioned by the Treasury for the purposes of a scheme of technical and advisory work. The object in view is to provide in an adequate manner for work of a technical and scientific nature (*e.g.*, analytical work, investigations into plant diseases and diseases of animals, and the breeding of the best varieties of cereals), from which useful results may be obtained for the information and guidance of agriculturists. Much progress has been made during the year in organising the four divisions required for giving effect to the scheme, namely, the Seeds and Plant Diseases Division, the Plant Breeding Division, the Chemical Division, and the Veterinary Division. Laboratories in the Royal College of Science have been temporarily placed at the disposal of the Divisions. The Department's existing Seed Raising Station at Ballinacurra, County Cork, has been extended and improved to meet the requirements of the Plant Breeding Division. The Seeds and Plant Diseases Division have the use of a temporary station at Clifden, County Galway, for the investigation of Plant Diseases, while the Veterinary Division are provided with an Observation Station at Roundwood, County Wicklow, for the investigation of "Braxy," a disease which causes much injury among sheep.

Agricultural Research.—The scheme referred to in the preceding paragraph is closely related to a general scheme which the Development Commissioners have had under consideration with a view to meeting the requirements of the United Kingdom as a whole in the matter of Agricultural Research. The general scheme provides for (1) Technical and Advisory Work, (2) Research Institutes, (3) Scholarships (intended mainly to supply trained scientists for the Research Institutes), and (4) special pieces of Research work which would not be dealt with by the Institutes. The Department are at present in correspondence with the Development Commissioners with reference to Ireland's position under this scheme in regard to Research Institutes, Scholarships, and special Research work. So far as technical and advisory work is concerned, Ireland is provided for by the separate schemes already referred to.

Horse-breeding.—Approval was obtained for the renewal for the financial year, 1912-13, of the grant from the Development Fund of £10,000 for horse-breeding. The Lords Commissioners of His Majesty's Treasury have acceded to the request of the Department that sums made available from the Development Fund for horse-breeding in Ireland, subsequent to the grant for 1912-13, should be advanced as grants in aid owing to the special conditions which govern the administration of the Department's Horse-breeding Schemes, and of the monies applied thereto.

Tobacco.—Advances not exceeding £35,000 in all, to cover a period of ten years, have been sanctioned, in aid of further

experiments in tobacco production in Ireland proposed to be undertaken by the Department.

The Department have also reported to the Development Commissioners, in accordance with the requirements of the Development and Road Funds Act, 1909, on applications, made for advances from the Development Fund by the Cork County Council, the Kerry County Council, the Carbery Agricultural Society, the Arklow Harbour Commissioners, and a firm trading under the name of Fertilizers, Ltd.

At their meeting on the 16th November, 1911, the Council of Agriculture passed a resolution approving of the report made by the Department to the Development Commissioners in regard to the application of the Irish Agricultural Organisation Society for a grant from the Development Fund, and recommending that any money available for agricultural co-operation should be given to the Department and administered by them. In January, 1912, the Department submitted to the Development Commissioners a draft scheme for the organisation of co-operative associations for (1) fruit growing, (2) early potato growing, (3) flax growing, (4) cow testing, (5) bee-keeping, and (6) lime-burning. In March, 1912, the Department were informed that the Commissioners could not regard the draft scheme as one for the organisation of co-operation in the sense which they felt bound to attach to the word, but the Commissioners intimated subsequently that they would be prepared to consider upon its merits an application of the Department for an advance in aid of the scheme. Finally, at their meeting on 11th July, the Commissioners decided that, with the exception of one proposal, viz., that relating to cow-testing associations, they could not recommend any advance from the Development Fund in furtherance of the objects of the scheme, and in the circumstances the Department withdrew their application. In the meantime the Commissioners had informed the Department that they were recommending a grant from the Development Fund to the Irish Agricultural Organisation Society on certain conditions, including the nomination of a number of representatives by the Department, and by the Council of Agriculture from their elected members, to act on the governing body of the Society. The Department, being of opinion that the acceptance of this proposal would not be consonant with the resolution passed by the Council at their meeting on 16th November, 1911, or with the fact that the Department had felt obliged to report unfavourably to the Commissioners on the application of the Society for a grant from the Development Fund, informed the Commissioners that they could not agree to the proposed representation on the governing body of the Society.

During the year facilities were obtained from the Government for the introduction in the House of Lords, of the Bill relating to the Irish Dairying Industry, which was referred to in the Eleventh Annual Report. With the exception of some minor modifications which were made at the instance of the Board of Trade and of the Board of Agriculture and Fisheries in the clauses relating to the trade descriptions of Irish butter in Great Britain, the Bill as introduced by the Government is identical in substance with the Draft submitted by the Department to, and approved by, representatives of various branches of the industry in Ireland. The Bill as amended in Report has received a Third Reading in the House of Lords, and has been read for the first time in the House of Commons.

On the 6th September, 1912, the Vice-President appointed a Committee comprising representatives of all branches of the Irish Dairying Industry, to advise the Department on any matters relating to the industry concerning which the Department may desire to have the Committee's recommendations. The Committee consists of the following:—

THE VICE-PRESIDENT,	} Ex-officio Members.
THE SECRETARY,	
THE ASSISTANT-SECRETARY in respect of Agriculture,	
THE DEPUTY ASSISTANT SECRETARY in respect of Agriculture,	
MR. R. A. ANDERSON, Secretary, I.A.O.S., Dublin.	
CAPTAIN LOFTUS A. BRYAN, D.L., Kilgibbon, Enniscorthy.	
MR. JOHN BUTLER, J.P., Minsuns, Callan, Co. Kilkenny.	
REV. E. F. CAMPBELL, M.A., Killyman, Moy, Co. Tyrone.	
MR. JOHN J. COOKE, President, Irish Creamery Managers' Association, Ballymore Co-operative Dairy Society, Co. Sligo.	
MR. WALTER R. CRAWFORD, The Priory, Tullyhogue, Co. Tyrone.	
MR. JAMES M'ARTHUR, J.P., Carnamaddy, Burt, Co. Londonderry.	
MR. A. O'SHAUGHNESSY, Chairman, Newmarket Dairy Co., Co. Cork.	
REV. THOS. PHELAN, P.P., Glenmore, Co. Waterford.	
MR. HENRY SHANAHAN, J.P., Director, Irish Creameries and Exporters Association, Ltd., County Cork.	
MR. R. TWOMEY, Cork Butter Market Trustees, Cork.	
MR. J. WILLINGTON, J.P., St. Kieran's, Birr, King's County.	
MR. A. POOLE WILSON, Inspector of Dairying, Department of Agriculture and Technical Instruction for Ireland.	

As in the case of the existing Advisory Committees on Live Stock and the Flax Industry, the Department hope to have the assistance of the Committee in connection with the schemes or other measures which the Department may from time to time adopt for the improvement of the industry with which the Committee is concerned. At the first meeting of the Committee held on the 3rd October, 1912, the Irish Creameries and Dairy Produce Bill was considered in detail.

As was mentioned in the last Annual Report, a Departmental Committee was appointed by the Vice-President in January, 1911, to "enquire into the effect which changes in the ownership of land in Ireland under the Land Acts have had, or may be expected to have, on the Fisheries of the country, and in particular on the Salmon Fishing Industry, and to make recommendations as to what steps, if any, it may be desirable in the circumstances for the State to adopt in the interests of Irish Fisheries."

DEPARTMENTAL
COMMITTEE ON
IRISH INLAND
FISHERIES.

The Committee have concluded their inquiries, and have presented their Report. They held 28 public sittings for the reception of evidence in various parts of the country, and examined 301 witnesses. The following is a summary of some of the Committee's principal conclusions and recommendations, which are at present under the consideration of the Department.

The Committee find that the changes in the tenure of land under the Land Acts have introduced new conditions which, on the whole, bear no promise of improvement or advantage to the fisheries. The tenant purchasers, with very few exceptions, do not make the most, or any, profitable use of their rights of fishing, which consequently have brought them no monetary gain. Netting both in fresh waters and in estuaries and the sea is carried on to an excessive degree. Poaching is widely prevalent with most disastrous effects. The protection afforded under present arrangements is quite insufficient.

The Committee are of opinion that a re-construction of the Boards of Conservators is necessary. They suggest that the Boards should consist of elected and nominated members, the members being fixed for each district by the Department—the elected members to form three-fourths of the whole body, and the nominated members one-fourth. The electorate should consist of all licence holders and riparian owners who pay the rate. The nominated members should be selected by the Department from the riparian owners and licence holders who are the largest contributors to the funds of the district.

An improvement in the financial circumstances of the Boards of Conservators is considered imperative. The Committee recommend, amongst other things:—a re-organisation of the systems in operation for the valuation of fisheries and for the collection of the ten per cent. rate; the repeal of the provision which allows the amount in respect of the ten per cent. rate paid by a fishery proprietor to be reduced by the amount of his licence duty; a revision of the licence duties on nets; and the imposition of a small licence duty for trout angling. They also recommend that properties in fishing should be relieved from contribution to local rates, and that, in lieu of these rates, Boards of Conservators should be empowered to increase the ten per cent. rate to a higher amount.

The Committee consider that the Boards of Conservators should have power to take over and administer fisheries not valued, or being unused or misused by the owners of the adjoining lands. They think that suitable forms of combination amongst tenant purchasers for the protection and letting of their fishings are essential, and would give most beneficial results. It is suggested that in future sales under the Estates Commissioners or the Congested Districts Board, fishing rights should, wherever possible, be reserved by the Commissioners or the Board. These Departments might, with the aid of such reservations, take action towards promoting combination amongst riparian owners in suitable ways. The Committee also recommend that netting in fresh waters should be abolished as far as practicable, that the licensing of new nets should be made subject to the approval of the Department, and that limitations should be placed on drift netting at sea. It is pointed out that the machinery for protection at present employed requires much strengthening, and that a much larger staff of bailiffs, who should be men of a higher type than at present, and better paid, is indispensable.

As was stated in their last Report, the Department have for some time had under consideration the question of the credit and capital available for rural classes in Ireland, with a view to ascertaining not only what improvements may be called for in the existing system of co-operative credit societies, but also the form of credit which seems best adapted to the needs of the new holders under the Land Acts.

In January, 1912, the following Committee was, with the consent of the Treasury, appointed by the Vice-President:—

- GEORGE MURNAGHAN, Esq., J.P. (who acted as a Member of the Irish Poor Law Commission), Chairman.
 ROBERT KYLE KNOX, Esq., LL.D. (late Chairman of the Board of Directors of the Northern Banking Company, Limited).
 CHARLES F. BASTABLE, Esq., M.A., LL.D., Professor of Political Economy, and Regius Professor of Laws, Dublin University.
 The Right Honble. WILLIAM F. BAILEY, C.B., one of the Estates Commissioners for Ireland.
 Reverend THOMAS A. FINLAY, M.A., Vice-President of the Irish Agricultural Organisation Society, and Professor of Economics in the National University of Ireland.
 SIR ROBERT ANDERSON, Bart., J.P. (of the firm of Messrs. Anderson and Macaulay, Belfast).
 WALTER MACMORROGH KAVANAGH, Esq., D.L.
 THOMAS PATRICK GILL, Esq., Secretary of the Department of Agriculture and Technical Instruction for Ireland.

The terms of reference to the Committee were as follows:—

- “To inquire into the existing system of credit available for the rural classes in Ireland; to suggest what, if any, improvements, not involving financial assistance from the Exchequer, should be made

in the system; and to consider especially the form of agricultural credit most suitable to the requirements of the occupiers of land affected by the Land Acts in the western districts, and throughout the country generally."

During the year the Committee have held numerous public sittings in various parts of the country for the reception of evidence. They hope shortly to be in a position to prepare their Report, which will be submitted to the Department with as little delay as possible.

The burning of lime throughout the country is receiving special attention from the Department.

IRISH MINERALS The services of an instructor in lime-
AND burning have been provided at the follow-
RAW MATERIALS ing places where kilns have been restarted
 by private enterprise:—Ballincollig, Co. Cork; Ballinagarde, Co. Limerick; Coole, Co. Westmeath; Lisduff, Queen's County. At Modristan, Co. Cavan, two lime kilns have been erected by a farmers' lime-burning society, according to plans and specifications supplied by the Department. A course of instruction in lime-burning was given at these kilns.

At a lime kiln near Skerries, Co. Dublin, an instructor carried out experiments with the object of ascertaining whether the local methods of burning could be improved upon. The results of these experiments were very satisfactory, and material, which was discarded prior to the carrying out of the experiments, is now being utilised.

At the request of the County Waterford Committee of Agriculture an inquiry was made into the question of lime-burning in the county, and reports thereon were forwarded to the Committee.

A large number of inquiries regarding the Mineral raw material resources of the country were received and dealt with.

At the invitation of the Committee of the London Aonach, 1912, a lecture on Irish Mines and Minerals was delivered at the Horticultural Hall, London, by the Department's Economic Geologist.

The arrangement under which grants of books (not exceeding £3 in total value) are made to approved
GRANTS OF BOOKS Village Libraries was continued during the
TO VILLAGE year. Before making a grant the Depart-
LIBRARIES. ment satisfy themselves that provision

has been made for the working of the library concerned in a satisfactory manner and that it is likely to be utilised or to prove of assistance in connection with their schemes of agricultural and technical instruction in the district. The books provided by the Department deal with agricultural, industrial and allied subjects; and the list from which donations may be selected has recently been revised and brought up-to-date.

PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS, 1911-12.

I.—AGRICULTURE.

This section of the Report deals with the agricultural year ended 30th September, 1912.

Recoupments in respect of expenditure by local authorities were made on the same lines as in the previous year.

(a.) AGRICULTURAL INSTRUCTION.

Each of the four principal schemes of itinerant instruction in agricultural subjects approved by the Department for the year 1911-12 was put into operation in every county with the exception of seven counties where the scheme of instruction in Butter-making was not adopted by the County Committees of Agriculture. The number of Instructors employed under these schemes in the year under review and in the preceding year was as follows :—

		1910-11	1911-12
Scheme of Instruction in Agriculture	..	40	43
" Horticulture and Bee-keeping	..	39	40
" Poultry-keeping	..	35	36
" Butter-making	..	33	33
Total	--	147	152

In 17 counties the instructors in poultry-keeping acted also as instructors in butter-making; the total number of persons employed in the year 1911-12, was, therefore, 135, as compared with 130 in the year 1910-11.

The following table indicates the extent to which the services of the instructors were utilised in connection with the principal duties assigned to them under these schemes in the years 1910-11 and 1911-12 :—

	Agriculture		Horticulture and Bee-keeping		Poultry-keeping		Butter-making	
	1910-11	1911-12	1910-11	1911-12	1910-11	1911-12	1910-11	1911-12
No. of lectures delivered	776	642	207	206	531	253	185	191
Estimated attendance at lectures	35,500	24,000	8,487	10,000	28,674	18,200	3,113	3,662
No. of classes conducted	78*	76*	Nil.	Nil.	142	124	200	224
No. of Students admitted to classes	1,339	1,405	Nil.	Nil.	—	1,327	2,080	1,700
No. of visits to farms, gardens, dairies, etc.	14,709	16,808	31,273	33,501	14,225	15,905	6,510	7,413
No. of demonstration plots laid down	2,124	2,113	302	354	—	—	—	—

* In 1911-12 one teacher, and in 1910-11 five teachers, were especially employed for these classes, in addition to the County Instructors.

In addition to the branches of work mentioned above, the instructors are charged with a number of other duties of which particulars will be found in the several schemes which are printed in the Appendices to this Report. Some of these duties, such as those discharged by the instructors in agriculture in connection with the Fertilisers and Feeding Stuffs Acts and by the horticultural instructors in connection with the Destructive Insects and Pests Acts, are of especial importance to the agricultural community and make increasing demands on the time of the instructors.

Duties of a nature somewhat similar to those performed by the instructors appointed by county committees of agriculture under the schemes referred to are also discharged by persons employed under schemes administered directly by the Department. Under such schemes there were employed in the year 1911-12 in the congested districts of the western counties a staff of 49 assistant agricultural overseers with 4 overseers. The work of each assistant overseer is confined to a comparatively small district and he is mainly employed in giving individual instruction to small holders in that area who need his services. The needs of farmers who have received new or enlarged holdings on estates settled under the Irish Land Acts, 1903 and 1909, receive particular attention and assistant overseers are located in the districts where the largest numbers of these holdings are found. The assistant overseers also afford instruction through the medium of field demonstration plots. The number of these demonstrations carried out by them in the year 1911-12 was 12,140.

Under the scheme for improvement in the management of creameries which is also administered directly by the Department, 2,182 visits were paid to creameries during the year by the staff of instructors employed specially for this work.

The agricultural schools and colleges where extended courses of instruction were provided in the year 1911-12 in accordance with programmes approved by the Department numbered nineteen. Of these nine (seven for male students and two for female students) were conducted directly by the Department, and ten (one for male students and nine for female students) were under private management. No new agricultural school was opened during the year, nor were any additional places for resident pupils available for the session 1911-12. The work of preparing the building acquired in the previous year, at Greenmount, near Antrim, for the purpose of a school for the counties of Antrim and Down, was, however, completed, and arrangements made for opening the school for the 1912-13 session. Places for twenty-five resident pupils are provided at this school. A centrally situated site for an agricultural institute for the counties of Donegal, Londonderry and Tyrone was acquired by the Department at Ballycolman, Strabane, and preparations are being made for the erection of a building to accommodate

thirty resident students. It is expected that this Institute will be opened for teaching in 1913. Antrim school is intended for male students only. At the Strabane Institute several short courses, open alternately to male and to female students, will be given annually.

The number of places filled by resident pupils at agricultural institutions during the years 1909-10, 1910-11, and 1911-12 is shown in the following table :—

Male Students.			1909-10	1910-11	1911-12
Institutions under Department's Management (7)	..	..	169*	176*	169*
Institution under private Management (1)	..	..	20	20	26
TOTAL			189	196	195
Female Students.					
Institutions under Department's Management (2)	..	..	84	104	106
Institutions under private Management (9)§	..	..	115	122	135
TOTAL			199†	226†	241†
TOTAL OF MALE AND FEMALE STUDENTS.			388	422	436

* Includes students for whom maintenance allowances were provided instead of residential accommodation at the Department's institutions.

† At the Department's institutions for female students four sessions are held annually, and at private institutions two sessions annually. The number of places filled throughout the year, as shown above, is, therefore, much less than the number of pupils admitted to the courses.

Two of the nine schools for girls, which are under private management, receive day pupils only.

At three of the institutions managed by the Department courses of training are provided for students who wish to qualify for itinerant instructorships in agriculture, horticulture, butter-making, or poultry-keeping, or for teacherships in agricultural schools. The training courses for male students are given in the Agricultural Faculty of the Royal College of Science, Dublin, and at the Albert Agricultural College, Glasnevin. The courses for female students are given at the Munster Institute, Cork. During the year 1911-12, twenty-three students,—eleven from the Royal College of Science, four from the Albert College, and eight from the Munster Institute—completed their courses successfully. As a rule up to the present these students obtain employment on the Department's staff or as county instructors or teachers as soon as their training is concluded. The number so employed now amounts to one hundred and forty-nine.

The full associate course of training at the College required in order to obtain a diploma has now been extended to four years, and consequently the scholarships offered annually by the Department in connection with the agricultural faculty will be tenable for four years, to enable students to complete the full programme.

The training of teachers for employment under the Department's programme of agricultural education was continued during the 1911-12 session, as in previous years.

Eight students, seven of whom were holders of scholarships, completed the three years' course of training in June, 1911, and obtained the college associateship in agriculture. During 1911-12 all received appointments in connection with the Department's educational schemes.

Seventy-seven candidates sat at the examination for scholarships in the faculty of agriculture held in August, 1911, in accordance with the terms of the prospectus printed in the Appendices, page [27] of this report, and, as a result, twelve new scholarships, eleven in agriculture (one of which was for the third-year course) and one in creamery management, were awarded. None of the candidates in horticulture or forestry reached the qualifying standard. Twenty-two scholarships awarded in the previous year, viz.: twenty in agriculture, one in horticulture and one in forestry, were renewed in full for the 1911-12 session. There was one fee-paying associate student in the faculty during the session.

The total number of students in the faculty at the close of the session in June, 1912, was :—

First Year,	11
Second Year	11
Third Year,	18
Total ..	35

Eleven of the third-year students passed their final examinations and were awarded the college associateship in agriculture. Four of the eleven decided to take out a post-graduate course and were re-admitted to the college, one as the holder of a Royal Scholarship, and three as holders of special research scholarships—provided by the Department.

Up to the end of the 1911-12 session, eighty-three students who entered the faculty as holders of scholarships provided by the Department had completed their course. Of these, thirty-nine are employed as itinerant instructors in agriculture, three as teachers of agricultural classes, ten at the Department's colleges and stations, and twelve on the central staff of the Department.

The courses of training in agriculture and horticulture provided at the Albert Agricultural College were continued in 1911-12.

ALBERT AGRICULTURAL COLLEGE. The agricultural course extended from the 10th October, 1911, to the 9th August, 1912, and the horticultural course from the 10th October, 1911, to the 30th September, 1912. The agricultural course forms an excellent training for young farmers who desire to enter either the agricultural faculty of the Royal College of Science or to follow the farming profession in Ireland.

The instruction afforded at the agricultural course is also suitable as a preliminary general training for young men who intend to qualify subsequently as creamery managers. This course followed by an apprenticeship in a suitable creamery and supplemented by a course of technical instruction in dairying at Ballyhaise agricultural station is the best preparation for a person with no previous knowledge of creamery work who is desirous of competing for a scholarship in creamery management at the Royal College of Science. The entrance examination for this course was held in September, 1911, and was attended by sixty-seven candidates. Thirty-five of these candidates, all of whom were sons of farmers, qualified for entrance to the course and were admitted. The programme of the entrance examination is given in the Appendices, page [29].

At the examination held in August, 1912, five of the students who followed the agricultural course were successful in obtaining scholarships tenable at the Royal College of Science.

The horticultural course was continued on the lines of the previous year. The course is intended only for persons who have had a thorough practical knowledge of gardening, and is designed mainly to enable applicants to become qualified for appointments as county instructors under the Department's scheme of instruction in horticulture and the management of bees. The students receive payment for the work done by them in the college gardens, and they are provided with furnished lodgings in a suitable building on the college farm. As the accommodation is limited not more than eight or nine students can be admitted to any one session. Fifteen applicants for admission to the 1911-12 session attended the entrance examination in August, 1911, and of these, five were found fit to take advantage of the course of instruction. Three students who had attended the 1910-11 session were re-admitted for a second year's training. The number of students at the 1911-12 session was, accordingly:

First Year	..	..	..	5
Second Year,	..	..	..	3
Total				8

As a result of the examination held at the conclusion of the session, the three second-year students and one of the first-year

students were approved as qualified for appointment to county instructorships, and two of the first year students were re-admitted for further training.

Two of the three second-year students, who qualified for the position of instructors, were successful in obtaining scholarships in horticulture, tenable at the Royal College of Science, and entered that College for the 1912-13 session. The remaining two students, who qualified for the position of itinerant instructor obtained appointments as such under county committees of agriculture. Thirty-one men trained in the school are now employed in connection with the Department's horticultural work. The course at the horticultural school includes instruction in bee-keeping. No special courses in this subject for instructors were required during the year 1911-12, as all the instructors in horticulture were, with one exception, qualified to act as instructor in both horticulture and bee-keeping.

The programme of the entrance examination for the horticultural school is given in the Appendices, page [31].

The following table shows the number of candidates for admission to, and the number of students in residence at the Albert Agricultural College for the year 1911-12 and the two previous years:—

	Candidates			Students in Residence		
	1909-10	1910-11	1911-12	1909-10	1910-11	1911-12
Agricultural course,	60	71	67	35	35	35
Horticultural course,	13	17	15	7	9	8
Royal College of Science course	—	—	—	16	15	15
TOTALS,	73	88	82	58	59	58

Farm apprenticeships for youths who proposed to follow farming in Ireland were provided, as in previous years, at the Department's agricultural stations at Athenry, Ballyhaise and Clonakilty.

At Athenry the course of instruction given was mainly practical, while at Ballyhaise and Clonakilty the students received a considerable amount of class instruction, especially in the winter and spring months. Arrangements were, however, made in connection with the 1912-13 session at Athenry under which the apprentices would receive a greater amount of class instruction than formerly, and, with this object in view, one of the students who obtained the associateship in agriculture of the Royal College of Science in June, 1912, was appointed science master at the station. During some years past apprentices were admitted to Athenry station at any time during the session

as vacancies occurred. In future, however, apprentices will be admitted only at the opening of the session, which will begin about the middle of October in each year.

The course for agricultural apprentices given at Ballyhaise station, in the year 1911-12, which was on the lines followed in the preceding year, extended from the 10th October, 1911, to 9th August, 1912. Seventeen students were admitted, of whom ten attended throughout the session, five attended during the winter term only, and two during the summer term only. In addition to the agricultural course, a special course of instruction in creamery management on the same lines as in previous years was conducted at this station from October, 1911, to March, 1912. Twenty-six candidates attended the entrance examination in connection with this special course, and of these fourteen were admitted. Provision was made by the Department to admit to this course as holders of free places, a number of bona-fide managers of creameries or auxiliary creameries of at least three years' standing. Each holder of a free place was required to lodge with the principal of the station on entrance the full fee payable by an ordinary student, on the understanding that the fee would be returned at the conclusion of the course provided the Department were satisfied that the student had taken full advantage of the course. Three managers of creameries were admitted on these terms and took out the course satisfactorily. Of the total of seventeen students who joined the creamery course fifteen attended the examination in technical subjects as applied to creamery management held in March, 1912. Four passed in all the subjects and were awarded certificates under the Department's scheme for improvement in the management of creameries; three passed in four subjects, and three in three subjects of the examination. Five of the students at the session in question availed themselves of the opportunities offered by the Department for further practical training at selected creameries. One student was admitted to the station as apprentice in cheese-making during the season May to October, 1912. Brief details of the results of the cheese-making at the station are given at page 84 of this Report.

At Clonakilty agricultural station the session lasted from October, 1911, to August, 1912. Thirty apprentices were admitted. Ten of the apprentices were holders of scholarships of the value of £20. Four of these scholarships were provided by the Tipperary (N.R.) county committee of agriculture, and three each by the county committees of agriculture of Kilkenny and Wexford. The scholarships were offered for competition amongst students who had attended winter agricultural classes in the respective counties during the session 1910-11, and were awarded on the result of special examinations held by the Department. The agricultural committees of these three counties made provision for similar scholarships at this station for the 1912-13 session.

The total number of students, including paid apprentices, at agricultural stations for the years 1908-9, 1909-10, 1910-11, and 1911-12 was as follows:—

	1908-9	1909-10	1910-11	1911-12
Athenry, . . .	10	12	12	12
Ballyhaiss, . . .	35	39	38	35
Clonakilty, . . .	30	30	30	30
	75	81	80	77

The percentage of agricultural students of each class at the three stations during these years was as follows:—

Valuation of Parents' Holding	Percentage of Total Agricultural Students			
	1908-9	1909-10	1910-11	1911-12
Sons of farmers the annual valuation of whose holding was:—				
Under £20 . . .	31	31	27	34
Between £20 and £40 . . .	19	26	28	42
„ £40 and £100 . . .	22	17	19	18
Over £100 . . .	9	20	20	2
Sons of persons other than farmers . . .	19	6	6	4
	100	100	100	100

It will be observed that in the year under review more than three-fourths of the holders of agricultural apprenticeships at these stations were sons of farmers whose holdings do not exceed a valuation of £40 per annum. Of the fifty-nine apprentices at the agricultural stations during the 1911-12 session, eighteen had already taken out a course of instruction under the Department's scheme of winter agricultural classes.

This scheme, particulars of which will be found in the Appendices, page [71], which was practically identical with that for the previous year, was put into operation by twenty-eight county committees of agriculture who established classes at seventy-six centres.

The total number of students admitted to the classes was fourteen hundred and five.

Classes under the scheme were established in counties Donegal and Dublin for the first time, and were renewed in county Kildare after a lapse of some years. In county Meath the scheme was not in force for the year under review, the

classes for the previous two years having been very poorly attended, and, in county Longford, though classes were proposed, they were not successfully established.

It will be seen from a comparison with the previous year's figures that there was a net increase of one in the number of counties adopting the scheme and a decrease of two in the number of class centres, while the total number of students admitted increased by nearly seventy.

Thirty-five of the county itinerant instructors in agriculture were engaged in conducting the classes, and one teacher was specially engaged for the work.

The following table shows the progress of the scheme since its inception :—

Year	Number of counties adopting the scheme	Number of classes established	Number of students admitted
1902-3, . . .	2	2	44
1903-4, . . .	7	7	161
1904-5, . . .	8	18	317
1905-6, . . .	11	25	422
1906-7 . . .	12	28	449
1907-8 . . .	15	33	529
1908-9, . . .	20	50	875
1909-10, . . .	26	70	1,166
1910-11, . . .	27	78	1,339
1911-12, . . .	28	76	1,405

Details as to the classes held during the 1911-12 session are appended. Each class met on two days weekly.

COUNTY AND CLASS CENTRES.	Duration of Course in Weeks.	Number of Students admitted.	Subjects other than Agriculture, in which instruction was given.
Antrim—			
Ballymoney, . . .	16	21	Veterinary Hygiene, Horticulture, and Poultry-keeping.
Ballymena, . . .	16	19	
Armagh—			
Killylea, . . .	17	11	Veterinary Hygiene and Horticulture.
Clare, . . .	17	14	
Drumbee, . . .	17	12	
Carlow—			
Bagenalstown, . . .	16	11	—
Ballen, . . .	17	12	
Cavan—			
Killeshandra, . . .	16	12	Horticulture.
Ardlougher, . . .	15	18	
Clare—			
Ennis, . . .	17	20	Horticulture.
Killadysert, . . .	16	10	
Scariff, . . .	17	31	
Kilkee, . . .	17	18	

COUNTY AND CLASS CENTRES	Duration of Course in Weeks.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Cork—			
Araglen,	13	16	Horticulture.
Grenagh,	16	30	
Meelin,	16	13	
Rosscarbery,	12	26	
Analeen,	14	20	
Barryroe,	14	19	
Taur,	16	20	
Ballineen,	14	25	
Kiskeam,	16	30	
Donegal—			
Letterkenny,	16	30	Veterinary Hygiene and Horti- culture.
Stranorlar,	16	28	
Down—			
Downpatrick,	16	20	Veterinary Hygiene and Horti- culture.
Banbridge,	16	20	
Dublin—			
Rathcoole,	16	13	Horticulture.
Balbriggan,	16	22	
Fermanagh—			
Maguiresbridge,	16	12	Horticulture.
Kesh,	*12	9	
Galway—			
Turloughmore,	* 8	10	Horticulture.
Cummer,	* 8	12	
Barnaderg,	* 2	—	
Kerry—			
Abbeydorney,	19	11	Horticulture.
Killarney,	*16	14	
Kildare—			
Monasterevan,	12	9	Horticulture.
Maynooth,	13	14	
Kilkenny—			
Graigueamanagh,	16	15	Horticulture.
Kilmanagh,	16	26	
Listerlin,	16	31	
Freshford,	16	15	
The Rower,	16	28	
King's—			
Geashill,	18	12	Horticulture.
Kilcormac,	18	10	
Leitrim—			
Castlefore,	16	24	Horticulture.
Ballinamore,	16	22	
Limerick—			
Newcastle West,	17	25	Horticulture.
Mount Collins,	17	29	
Hospital,	*11	24	
Kilfinane,	17	24	

* Class discontinued owing to unsatisfactory attendance

COUNTY AND CLASS CENTRES.	Duration of Course in Weeks.	Number of Students admitted.	Subjects other than Agriculture, in which instruction was given.
Londonderry—			
Moneymore,	16	25	Veterinary Hygiene and Horti- culture.
Dungiven,	16	24	Horticulture.
Louth—			
Ardee,	15	10	Horticulture.
Mayo—			
Balla,	18	14	} Veterinary Hygiene and Horti- culture.
Ballinacorrige,	18	28	
Bonniconlan,	18	11	
Attymachugh,	17	18	
Queen's—			
Pass,	17	17	} Horticulture.
Clonabreen,	17	21	
Roscommon—			
Highlake,	16	21	Horticulture.
Crossna,	17	13	Veterinary Hygiene and Horti- culture.
Sligo—			
Ballinacarrow,	16	19	} Horticulture.
Riverstown,	16	20	
Tipperary, N.R.—			
Borrisokane,	16	30	} Horticulture.
Newport,	17	33	
Tipperary, S.R.—			
Cahir,	17	28	} Veterinary Hygiene and Horti- culture.
Killenaule,	16	22	
Tyrone—			
Moy,	16	15	Veterinary Hygiene and Horti- culture.
Cranagh,	16	14	Veterinary Hygiene.
Dunnamore,	17	12	Veterinary Hygiene and Horti- culture.
Drumclaph,	17	14	Veterinary Hygiene.
Mountfield,	17	13	Veterinary Hygiene.
Waterford—			
Ballinamult,	* 8	11	} Horticulture.
Tallow,	16	15	
Wexford—			
Cushinstown,	16	14	} Horticulture.
Enniscorthy,	16	26	

Total—76 Classes . . 1,405 Students.

* Class discontinued owing to unsatisfactory attendance.

Reference to the preceding table will show that, in addition to the ordinary agricultural teaching, it was found possible to arrange for instruction in veterinary hygiene at twenty-two classes. Outdoor demonstrations, usually four at each class, and of from one to two hours' duration each, were given by the county itinerant instructors in horticulture at the classes in twenty-seven counties, and in county Antrim, as in previous years, the county itinerant instructor in poultry-keeping gave a few lectures dealing with that subject at each of the two classes.

Under the Department's Programme for Technical Schools and Science and Art Schools and Classes, 1911-12, the maximum grant payable in respect of eligible students at winter agricultural classes was at the rate of 4d. per attendance hour. This was an increase of 1d. per attendance hour as compared with the rate allowed in the previous year.

The county committees of agriculture of Kilkenny, Tipperary, N.R., and Wexford again offered scholarships, tenable at one of the Department's agricultural stations, for competition among the students attending their respective classes. The Department conducted a special examination in each of these counties, and, on the results, three students from county Kilkenny, two from county Tipperary, N.R., and three from county Wexford, were awarded scholarships tenable at Clonakilty agricultural station for the session 1912-13.

It may be mentioned that, apart from candidates who obtain scholarships provided by county committees of agriculture, students from winter classes whose progress and attendance have been satisfactory receive preference in connection with the award of farm apprenticeships at the Department's agricultural stations, and are exempted from the usual entrance examination for admission to the stations.

The Department were glad to observe that past students of the classes continued to be prominent in carrying out experimental and demonstration work in connection with the county agricultural instruction scheme, thus utilising for the benefit of farming generally in their districts the knowledge which they had acquired at the classes.

At Mountbellew school a course in agricultural and horticultural subjects was conducted by the MOUNTBELLEW FRANCISCAN BROTHERS. The course opened AGRICULTURAL on the 2nd October, 1911, and concluded SCHOOL. on the 26th July, 1912. The syllabus of instruction given at the school is approved of by the Department. A thorough practical training of the students in all branches of farm work is a chief feature of the teaching. The class rooms are well equipped with scientific apparatus for the teaching of elementary science in its bearing on agriculture, and the school farm is supplied with modern farm machinery and implements. During the year under review

twenty-six resident students attended the school. Two day students were also admitted.

Since the beginning of the year meetings of farmers of the district have been held at the college at frequent intervals, and what may be described as a farmer's club has been formed. The objects are to arrange for lectures on agricultural subjects by the college staff to members of the club, and generally to aid the members with advice from the staff on farming matters.

Arrangements for the establishment at Greenmount, Muckamore, near Antrim, of the agricultural
ANTRIM school referred to in the Department's
AGRICULTURAL Annual Report for 1910-11 were completed
SCHOOL during the year, and the opening of the
school was fixed for the 8th October, 1912.

The school is situated about a mile from the town of Antrim, and includes a residence and a farm. Residential accommodation for twenty-five students and for the staff has been provided, and the school and farm have been fully equipped with the apparatus, machinery and implements necessary to afford the students a thorough training in practical farm work, together with a knowledge of the scientific principles on which agricultural practice is based.

The farm, which is being managed by an experienced agriculturist, extends to about one hundred and eighty-seven acres, of which some one hundred and thirty are arable. A system of mixed tillage farming will be pursued, and the students will be required to take part in all branches of the farm work, and will also receive practical instruction in horticulture, bee-keeping, butter-making and poultry-keeping.

It may be mentioned that the school course is not intended as a preparation for any examination. Its sole object is to afford students a sound technical training in farming, which will benefit them in their future careers as farmers. All applicants for admission are required to give an undertaking that it is their intention to become farmers in Ireland, and they must submit, on their application forms, evidence that they are to obtain farms of their own or occupation at bona fide farmwork on conclusion of their course at the school.

Applicants for admission must be not less than seventeen years of age on the 1st October immediately preceding the opening of the session they desire to attend.

Preference is to be given to applicants from county Antrim, but at least six places are to be reserved annually for applicants from county Down nominated by the county committee of agriculture and technical instruction of that county.

The scale of fees for tuition, board, residence, and ordinary medical attention, is as follows:—

- I. Payable by students from county Antrim whose parents derive their means of livelihood solely or mainly from

farming, and the aggregate annual tenement valuation of whose holding or holdings

	Fee for Session.
1. Does not exceed £20	£3
2. Exceeds £20 but does not exceed £40	6
3. „ £40 „ „ „ £100	10
4. „ £100	15

II. Payable by students from county Antrim who are not the sons of farmers 20

III. Payable by students not from county Antrim .. 50

The fee payable to the school by the Down county committee of agriculture and technical instruction in respect of each student nominated by them will be £50 per session, and it is understood that the Committee propose that each student so nominated shall be required to pay to them the sum of £10 towards this amount.

The school is managed by a committee, composed of six members nominated by the Antrim county committee of agriculture, one member nominated by the Down county committee of agriculture and technical instruction, and one member nominated by the governors of the Henry Trust. The managing committee acts as a sub-committee of the Antrim county committee of agriculture who are responsible for the maintenance of the school.

With a view to deciding certain questions affecting the establishment and management of the AGRICULTURAL INSTITUTE FOR NORTH-WEST ULSTER. institute, the Department convened a conference of representatives of the county committees of agriculture of the counties concerned, viz., Donegal, Londonderry, and Tyrone. The conference was held at

Londonderry on the 22nd August, and was attended by representatives of each of the committees named, and also by the Vice-President and some officers of the Department.

The arrangements approved by the Department and the committees concerned were, briefly, as follows:—

The institute should be residential, and situated near Strabane. The Department should (1) bear the cost of erection of the buildings, provision of equipment, furniture, etc., (2) appoint and pay the staff, and (3) generally manage the institute. The county committees concerned should appoint a small advisory committee in connection with the management of the institute. Courses of instruction in agriculture for young men, and in poultry-keeping, buttermaking, and domestic economy for young women, should be provided. Each committee sending

pupils to the institute should contribute at the rate of 15s. per week per pupil to the funds of the institute.

A site for the institute has been secured near Strabane, and the Department have under consideration plans for the erection of buildings somewhat on the lines of those at the agricultural station at Clonakilty.

The Department's programme of agricultural education for

AGRICULTURAL
SCHOOLS
FOR GIRLS.

girls was carried on at eleven schools. Two of these schools, the Munster Institute, Cork, and the Ulster Dairy School, Cookstown, county Tyrone, are residential institutions managed by the Department directly, and are open to pupils from all parts of the country. At the nine other centres local schools of rural domestic economy are working, under private management, subject to the Department's supervision. These nine schools are intended chiefly for girls living in their immediate neighbourhood who attend as day-pupils, but residential places also are provided at seven of these centres.

At the Munster Institute and Ulster Dairy School there are four terms annually. At the local residential schools the year is divided into two terms. The fee per term in both cases is £3 8s. or £3.

The aim of these schools is mainly to provide training for girls of the farming class in the work of their own homes. In addition, the Munster Institute and the Ulster Dairy School provide advanced courses to enable pupils to qualify as (a) dairymaids in creameries or large dairies, (b) county instructors in dairying and poultry-keeping, and (c) teachers in agricultural schools for girls. The course for dairymaids occupies three terms, and that for instructors or teachers extends to at least six terms. Pupils retained for special training as instructors or teachers will in future be required to pay a fee of £6 6s. per term for the fourth and each subsequent term.

The principal subjects of the programme are:—dairying, poultry-keeping, cottage gardening, household management, cookery, sewing, laundrywork.

Instruction in butter-making and poultry-keeping is also provided at two schools of domestic training, viz., Dunmanway, county Cork, and Dundrum, county Tipperary. Both these schools are recognised for the award of scholarships by county committees of technical instruction. The Dundrum school is recognised as well for award of scholarships by the agricultural committees in county Tipperary.

At all schools the qualifications of the teachers must be approved by the Department.

The total number of places available throughout the year for resident pupils at these schools was 243. All these places were filled with the exception of three at the Westport school.

The attendance at the four terms held at the institute during the year amounted to 224 pupils, including re-admissions. At the end of the year there were 190 applicants awaiting their turn for admission. The courses for the training of teachers and of county instructors were continued during the year. Eight students passed their final examinations for these positions, including three instructors who took out supplementary courses in butter-making or poultry-keeping. Eight qualified students of the institute obtained employment in connection with the teaching of the Department's programme. The total number of students so employed now amounts to 53, viz., 24 instructors in poultry-keeping and butter-making, 1 instructor in poultry-keeping only, 7 instructors in butter-making only, and 21 teachers in agricultural schools. Seventeen students who completed the third-term course passed as suitable for admission to a further course of training in a creamery, with a view to acquiring a thorough acquaintance, under actual commercial conditions, with the work of a creamery dairymaid.

The four terms held at this school during the year were attended by 198 students, including re-admissions. Applications for admission were received from 169 girls. Two students who had satisfactorily completed the fourth term course were transferred to the Munster Institute to complete the course of training prescribed for instructorships or teacherships. Eight students were offered facilities for further training in a creamery with a view to qualifying as creamery dairymaids.

Prospectuses of the Munster Institute and the Ulster Dairy School will be found in the Appendices, pages [39] and [40].

These schools, nine in number, work under agreements with the Department, and are aided by grants towards the expenses of management, salaries of approved teachers, maintenance of resident pupils, and cost of teaching equipment.

Day and resident pupils are received at six schools, day-pupils only at two schools, and resident pupils only at one school. There is a good demand for places for resident pupils, but in some cases difficulty is experienced in obtaining a sufficient and regular attendance of day-pupils, especially during spring and summer when the girls are required for farm work at their homes.

The following table shows the number of day and of resident pupils admitted to the schools during the year 1911-12.

School	Day Pupils	Resident Pupils, including re-admissions	Total
Westport, Co. Mayo, . . .	72	31	103
Claremorris, Co. Mayo, . . .	51	28	79
Swinford, Co. Mayo, . . .	68	30	98
Portumna, Co. Galway, . . .	44	50	94
Clifden, Co. Galway, . . .	46	30	76
Killeshandra, Co. Cavan, . . .	10	11	21
Ramagrange, Co. Wexford, . . .	—	80*	80
Loughglynn, Co. Roscommon, . . .	62	—	62
Benada, Co. Sligo, . . .	97	—	97
Total, year 1911-12 (9 schools)	450	260	710
1910-11 (9 schools) . . .	411	245	656
1909-10 (9 schools) . . .	438	215	653
1908-9 (9 schools) . . .	474	185	659
1907-8 (8 schools) . . .	305	161	466
1906-7 (5 schools) . . .	248	135	383
1905-6 (3 schools) . . .	228	40	268

*At Ramagrange school the Department provided 30 places at a fee of £3 each for resident pupils at each half-yearly session. In addition 10 resident pupils, for whom no grants were made by the Department, were admitted to each session by the Managers at a fee of £10 each.

Pupils of schools of rural domestic economy are examined by the Department's Inspector at the close of each session, and any pupil who displays exceptional ability is passed on to the third-term course at the Munster Institute with a view to qualifying as an instructor or teacher. Up to the present 11 pupils whose training commenced at one of these schools have qualified as teachers or instructors. Suitable pupils of these schools are also admitted to the Munster Institute to enable them to qualify as creamery dairymaids.

The Department's scheme of instruction in agriculture for the year 1911-12 was put into operation by every county committee of agriculture. SCHEME OF INSTRUCTION IN AGRICULTURE. Forty-three instructors were employed under the scheme. Four instructors were employed in county Cork, two instructors in each of the counties of Antrim, Clare, Galway, Kilkenny, Limerick, Mayo and Tyrone, and one instructor in each of the remaining twenty-five counties.

An indication of the rate at which the work under the scheme has developed is afforded by the following table which shows the number of instructors employed each year since the inception of the scheme :—

Year.	Number of instructors employed.					
1900-1	8
1901-2	10
1902-3	10
1903-4	17
1904-5	21
1905-6	23
1906-7	30
1907-8	34
1908-9	36
1909-10	36
1910-11	40
1911-12	43

The duties assigned to the instructors are fully detailed in the scheme which will be found at page [69] of the Appendices to this Report.

During the winter months from November to March the teaching of winter agricultural classes again formed the chief employment of almost all the instructors, thirty-five of whom were engaged at this work. Evening lectures for farmers were also given by the instructors on days when they were not engaged in teaching classes. 642 such lectures were delivered at 297 centres, the estimated total attendance thereat amounting to close on 24,000 persons, giving an average of 38 per lecture. The figures for itinerant lectures and the attendance thereat have declined each year since 1907-8, owing to the more general adoption of the winter agricultural class scheme and the consequent substitution of class teaching for lecturing.

During the summer months, the instructors carried out the work of judging under the Department's scheme of prizes for cottages and small farms. Each instructor judged in a county other than that in which he was employed. The time occupied in judging varies from about two to six weeks. This work affords the instructors each year an opportunity of widening their experience of the methods of agriculture practised in the country generally.

Under the Fertilisers and Feeding Stuffs Act and the Weeds and Seeds Acts, the instructors act as official samplers, and a considerable portion of their time is now given to this important work.

During the year under review, the instructors were also required to report on applications for the consent of the Department, under section 32 of the Irish Land Act, 1909, to the felling of trees on holdings affected by that Act.

The number of visits paid to farms by instructors was 16,808, an average of 391 for each instructor.

Particulars of the field and live stock experiments, and of the demonstration work, carried out by the Instructors will be found on page 70 of this Report.

With a view to affording the instructors information with regard to recent agricultural research work, the Department arranged a series of six lectures by specialists at the Royal College of Science, Dublin, on the 4th and 5th June, 1912. All the instructors, with one exception, attended. The results of recent investigations relating to the breeding and feeding of live stock, the diseases of plants and animals, and the testing, etc., of seeds were fully explained. After each lecture a general discussion on the subject dealt with took place. A conference of the instructors was subsequently held, on the 6th and 7th June, at which matters affecting their work in the country were fully discussed with the Department's officers and suggestions for future work considered.

The Department also arranged for a visit by ten of the instructors to farms and agricultural institutions in Great Britain during the last week in June and the first week in July, 1912. This tour was conducted by the Professor of Agriculture at the Royal College of Science. It was confined to instructors who had not participated in a similar tour organised in 1911. The instructors gain valuable experience from these tours, which afford them opportunities for inspecting farms illustrating the most approved agricultural practice adapted to the requirements of different localities.

Four overseers aided by 49 assistants were employed on the work of the Department's special schemes of agricultural instruction in the congested districts. Nine additional assistants were appointed during the year, two being assigned to each of the counties Kerry, Mayo and Galway, and one each to Sligo,

Clare and Donegal.

Besides the permanent overseers and assistants, a number of temporary assistants were employed during the spraying season, to give demonstrations and instruction in the spraying of potatoes.

The following table shows the number of overseers, assistant overseers, and temporary spraying demonstrators employed each year since 1907 inclusive :—

Year	No. of agricultural overseers	No. of assistant agricultural overseers	No. of temporary spraying demonstrators
1906-7 . . .	4	19	12
1907-8 . . .	4	23	11
1908-9 . . .	4	*†27	9
1909-10 . . .	4	*39	16
1910-11 . . .	4	*40	18
1911-12 . . .	4	*49	12

* One of these assistants acted as overseer for County Leitrim.

† Including one agricultural demonstrator in Roscommon.

The four overseers and forty-nine assistant overseers at present employed are located as follows:—

Districts	Overseers	Asst. Overseers
Co. Donegal,	1	6
Counties Mayo, Sligo, and part Roscommon,	1	15
Counties Galway, Clare, and remainder of Roscommon	1	17
Co. Leitrim,	—	*3
Counties Kerry and W. Cork,	1	8

* One of these assistants acts as overseer for County Leitrim.

As in previous years, a large number of plots was established for the purpose of demonstrating to farmers the advantage to be derived from the use of fresh seeds and the application of suitable manures. The number and nature of such plots laid down in 1911-12 are shown in the

following table:—

Description of Plot	Quantity of Seed, &c., supplied for each Plot	No. of Plots
Potato,	1 cwt.	2,595
Oats,	"	1,508
Barley,	"	125
Wheat,	"	210
Vegetables,	packet containing 7 varieties	1,041
Turnips and Mangels,	1 lb.	1,096
Grass,	12 lbs.	1,324
Artificial Manures,	1 cwt.	2,086
Lime,	10 cwts.	55
Basic Slag,	2-2½ cwts.	663
Potato Sprouting,	6-12 boxes	1,137
Catch Crops,	various quantities	300
TOTAL,		12,140

The above plots were distributed among the districts of the overseers as follows:—

District.	No. of Plots.
1. Co. Donegal,	1,808
2. Cos. Mayo, Sligo, and part Roscommon,	3,442
3. Cos. Galway, Clare, and part Roscommon,	3,310
4. Co. Kerry and West Cork,	2,608
5. Co. Leitrim,	972
Total,	12,140

The seeds and manures for these plots were supplied by the Department at approximately half the gross cost, and persons who received them undertook to cultivate their plots in accordance with the directions of the agricultural overseers. .

The number of plots established in 1911-12 showed a marked increase over the figures for previous years, as may be seen from the following table :—

Year	No. of plots established
1906-7,	8,834
1907-8,	8,288
1908-9,	8,843
1909-10,	9,579
1910-11,	10,586
1911-12,	12,140

During the summer, the overseers, and assistant overseers, together with the temporary demonstrators, devoted their time largely to giving demonstrations and instruction in the spraying of potatoes and the selling of hand spraying machines, at reduced prices, to small holders in districts where such machines were not readily procurable at reasonable prices. They also undertook the repair of defective spraying machines, supplying the necessary repair parts at cost price.

The following table shows the number of spraying machines sold and repaired by the overseers and temporary demonstrators throughout the congested districts during the season 1912 :—

District	No. of spraying machines sold	No. of spraying machines repaired
Co. Donegal	128	900
Counties Mayo, Sligo, and part Roscommon,	674	493
Counties Galway, Clare, and part Roscommon,	582	460
Co. Leitrim,	135	270
Co. Kerry and W. Cork,	158	163
TOTALS	1,677	2,286

The extent of the operations in connection with potato spraying during the past six seasons was as follows :—

Season	No. of Machines Sold	Quantities of Spraying Materials Sold						No. of Machines Repaired
		Sulphate of Copper			Washing Soda			
		T.	C.	Q.	T.	C.	Q.	
1907.	1,259	61	11	1	27	1	0	1,382
1908,	1,364	75	6	2	36	13	1	1,001
1909,	1,211	1	17	1	1	7	3	996
1910,	2,112	—			—			1,701
1911,	1,567	1	0	0	1	5	0	1,893
1912,	1,607	2	17	3	0	8	1	2,286

In consequence of the success which has attended the efforts of the overseers to induce local traders throughout the congested districts to stock sulphate of copper and washing soda, it was not necessary for the Department to arrange for the supply of spraying materials in 1911-12 save as regards Clare Island.

To overcome initial difficulties in the way of proper cultivation and to encourage and teach the use of agricultural implements by new holders in certain districts recently settled by the Congested Districts Board or the Estates Commissioners, the Department, at the beginning of 1911, sanctioned a temporary arrangement under which ploughs, drill grubbers, harrows, mowers, etc., purchased from local merchants, were supplied at three-fourths cost price for cash to a limited number of such farmers.

In July, 1912, however, owing to the general introduction of a new loan scheme (No. 18) under which loans are granted for the purchase of agricultural implements costing £6 and over, the arrangement referred to above was, to a great extent, superseded.

The total numbers of agricultural implements sold up to the end of September, 1912, under the above-mentioned arrangement, were as follows :—

Implements	Number Sold
Ploughs,	228
Drill body attachments,	49
Harrows,	34
Drill Grubbers,	57
Mowers,	110
Reaping attachments for Mowers,	54
Various,	12

As in previous years, syringes for the treatment of contagious abortion in cattle were sold by the overseers to holders of premium bulls, at the reduced price of five shillings each.

The total number of syringes sold up to the above date was 162.

Four new centres have been brought under this scheme, see Appendices, page [104], viz., Castlebar county Mayo, Glenties, county Donegal, VETERINARY DISPENSARIES. Carndonagh, county Donegal, and Mohill, county Leitrim. There are now thirty-one

veterinary surgeons employed who pay fortnightly visits to the districts shown in the following table :—

County	Headquarters of Veterinary Surgeon	Centres at which Dispensaries are held
Donegal . . .	Milford . . .	Tamny, Termon, and Carrigart.
Do.	Carndonagh . . .	Moville, Ballygorman, Clonmany.
Do.	Bundoran	Cliffony and Ballintra.
Do.	Falcarragh . . .	Creelough, Dunfanaghy, Bartonport, Dungloe and Gweedore.
Do.	Dunkineely . . .	Glencolumkille, Carrick, Killybegs and Donegal.
Do.	Strabane	Glenties, Ballinamore.
Leitrim . . .	Manorhamilton . .	Belcoo, Glencar, Crovales and Killyclogher.
Do.	Drumshambo . . .	Dowra, Keshcarrigan, Drumkeeran, Ballinamore and Ballyfarnon.
Do.	Mohill	Cloone, Carrigallen, Dromod, Drumsna, Farnaught.
Mayo	Ballina	Easkey, Ballycastle, Killala and Crossmolina.
Do.	Swinford	Charleston, Foxford, Kilkelly, Aclare and Kiltinagh.
Do.	Westport	Newport, Achill, Lisacorney, Louisburg, Mallaranny, Killavally and Ballycroy.
Do.	Belmullet	Barnatra, Gweesala, Drum, Bangor, Glenamoy and Doochoma.
Do.	Castlebar	Glenisland, Balla, Ross.
Rosecommon .	Boyle	Gurteen and Ballaghaderreen.
Do.	Castlerea	Urris, Frenchpark and Ballinlough.
Galway . . .	Galway	Spiddal and Oughterard.
Do.	Clifden	Letterfrack, Maam, Costello, Leenane, Carna, Recess and Roundstone.
Clare	Ennis	Tulla, Tubber, Scarriff and Ennistymon.
Do.	Kilrush	Labasheeda, Kilmihill, Lissycasey and Kildysart.
Do.	do.	Carrigaholt, Kilkee, Doonbeg and Miltown Malbay.
Kerry	Cahiriveen	Glenbeigh, Portmagee, Waterville, Caherdaniel and Sneem.
Do.	Killarney	Killorglin, Loochbridge, Rathmore and Kenmare.
Do.	Listowel	Ballylongford and Causeway.
Do.	do.	Lisselton and Knocknagoshel.
Do.	Tralee	Ardfert and Castlemaine.
Do.	do.	Castleisland and Kilsfynn.
Do.	Dingle	Anniscaul, Cloghane, Ballyferriter and Castlegregory.
Cork	Skibbereen	Leap, Toormore and Ballydehob.
Do.	Bantry	Ballingeary, Ahakista, Kealkil, Drimoleague and Glengariff.
Do.	Castletownbere . .	Adrigole, Eyries, Allihies and Lauragh.

The total number of cases treated during the year at the various dispensary centres and at the headquarters of the veterinary surgeons was 9,848 as compared with 9,472 during

the preceding twelve months as will be seen from the table below :—

County and Headquarters	No. of Dispensaries	No. of Cases treated at Dispensaries		No. of Visits paid to Farmers' Residences	
		1910-11	1911-12	1910-11	1911-12
DONEGAL :					
Carndonagh,	3	—	54	—	49
Milford,	3	122	163	66	78
Bundoran,	2	43	97	33	8
Falcarragh,	5	369	153	394	163
Dunkineely,	4	217	154	288	124
Glenties,	2	—	73	—	9
LECTRUM :					
Manorhamilton,	4	45	5	37	148
Drumshambo,	5	573	495	256	31
Mohill,	5	—	57	—	48
MAYO :					
Ballina,	4	638	518	121	114
Swinford,	5	398	239	188	108
Westport,	7	242	151	200	138
Belmullet,	6	134	70	156	148
Castlebar,	3	—	172	—	169
ROSCOMMON :					
Boyle,	2	239	518	15	114
Castleroa,	3	120	114	72	25
GALWAY :					
Galway,	2	89	59	32	22
Clifden,	7	233	147	421	232
CLARE :					
Ennis,	4	268	296	10	31
Kilrush,	4	950	1,463	254	243
Do.,	4	433	440	20	20
KERRY :					
Cahiriveen,]	5	281	286	222	245
Killarney,	4	214	293	48	78
Listowel,	2	48	44	32	44
Do.,	2	228	274	67	67
Tralee,	2	23	81	11	14
Do.,	2	29	28	14	7
Dingle,	4	70	69	61	103
CORK :					
Skibbereen,	3	121	260	62	48
Bantry,	5	41	113	7	42
Castletownhere,	4	141	188	77	104
TOTALS,	117	6,309	7,074	3,163	2,774

Should funds be available next year an effort will be made to extend the scheme to one or two other districts in which the services of veterinary surgeons are not utilised to any appreciable extent by the smaller farmers.

Thirty-six instructors in poultry management, seventeen of whom were engaged also for part of the year in giving instruction under the butter-making scheme, were employed in 1911-12 by the county committees of agriculture.

Particulars of the scheme will be found in the Appendices, page [75].

The county committees again provided funds for the establishment of poultry stations, and premiums were awarded for the

distribution of sittings of hen, duck, and goose eggs, and for services effected by stock birds at turkey stations. In addition to the foregoing the committee made grants of 50 per cent. of the actual cost, but in no case exceeding £2, to selected persons who provided themselves with portable wooden fowl-houses, and a similar grant not exceeding £1 for suitable day shelters. The most careful supervision was exercised in regard to the quality of the birds selected generally for station purposes, and it is gratifying to note that as a result of the encouragement given to those anxious to co-operate in developing the poultry industry, the number of stations in operation during the past year was considerably in excess of previous years.

The Department are of opinion that most valuable results are obtainable by means of instruction and advice given at the homes of poultry-keepers, and particular stress was laid on this branch of the instructor's work. Attention was directed from time to time to the necessity of the instructors paying more attention to this particular part of their duties, and as a result of increased exertions in this direction the instructors made 15,905 visits during the year under review.

Tutorial and practical classes were established by every county committee excepting in the counties of Cavan, Down, Fermanagh, Galway, Longford, Mayo, and Roscommon. The conditions governing the holding of such classes will be found in the Appendices, page [80].

In the year 1911-12 the instructors conducted at 124 centres 1,600 classes each of two hours duration, with an average attendance of 10 pupils. 253 lectures were also delivered, at which there was an average attendance of 72 persons.

The following table shows the progress of the work under this scheme during the past five years:—

Year	Counties	Number of Instructors	No. of Lectures	No. of Centres for Classes	No. of Classes held thereat	No. of Egg-Distributing Stations		Eggs Distributed	No. of Stations	No. of Stations	No. of Visits
						Hens only	Hens and Ducks		Turkey	Goose	
1907-8	30	28	895	96	1,474	305	233	53,919	467	92	9,245
1908-9	31	28	677	98	1,402	328	261	63,471	497	130	9,159
1909-10	32	23	588	140	1,523	337	282	66,187	532	140	10,198
1910-11	32	35	531	142	1,552	310	274	65,790	589	184	14,225
1911-12	33	36	253	124	1,600	389	282	68,365	661	230	15,905

The experimental trap nest scheme in connection with the keeping of egg-laying records, which was started during 1909-10, was continued at eleven centres where egg-distribution stations were in operation under the poultry scheme 1911-12. Persons selected to keep records under this scheme were supplied free

of charge by the Department with trap nests and poultry sheds, on their undertaking to keep for a period of two years an exact record of the number of eggs laid by each hen from a stated number of birds of approved pure breeds. A number of the stations originally established in 1909-10 was discontinued, as a matter of course, this season.

The following table contains particulars of the amounts paid by each county committee for premiums under the poultry scheme, 1911-12 :—

County	Hen and Duck Stations	Goose Stations	Turkey Stations
	£ s. d.	£ s. d.	£ s. d.
Antrim	73 3 9	—	45 6 0
Armagh,	83 1 3	12 0 0	56 0 0
Carlow,	34 13 9	6 0 0	9 18 0
Cavan,	129 7 9	23 10 0	72 0 0
Clare,	63 0 0	8 13 4	24 4 0
Cork,	246 16 3	44 0 0	74 12 0
Donegal,	203 18 9	31 13 4	40 0 0
Down,	123 15 7	17 10 0	68 0 0
Dublin,	32 12 6	—	—
Fermanagh,	94 12 6	8 0 0	40 0 0
Galway,	119 16 10	20 0 0	69 2 0
Kerry,	145 5 0	17 6 8	38 0 0
Kildare,	75 0 0	4 0 0	24 0 0
Kilkenny,	63 12 0	4 0 0	46 0 0
King's,	55 0 0	4 0 0	21 2 0
Leitrim,	57 10 0	9 10 0	48 0 0
Limerick,	74 15 0	—	22 0 0
Londonderry,	110 0 0	15 10 0	46 0 0
Longford,	53 17 6	16 0 0	26 0 0
Louth,	94 13 1	12 0 0	48 0 0
Mayo,	151 13 1	24 13 4	32 0 0
Meath,	113 7 6	14 6 8	60 0 0
Monaghan,	98 0 0	10 0 0	40 0 0
Queen's,	61 13 9	—	14 12 0
Roscommon,	107 13 9	30 12 2	54 0 0
Sligo,	101 0 0	17 10 0	27 10 0
Tipperary (N.R.),	95 0 0	11 10 0	31 12 0
" (S.R.),	74 5 0	16 16 8	29 16 0
Tyrone,	99 11 0	19 6 8	50 0 0
Waterford,	105 16 3	—	19 6 0
Westmeath,	119 6 3	34 0 0	73 10 0
Wexford,	93 1 3	10 0 0	40 0 0
Wicklow,	64 16 11	4 10 0	13 8 0
Totals, 1912,	3,219 16 3	446 18 10	1,303 18 0
" 1911,	2,884 10 11	360 2 2	1,157 10 0
" 1910,	3,026 19 3	273 16 8	1,048 14 0
" 1909,	2,899 19 6	254 3 4	974 14 0

Twenty-six county committees (*i.e.*, excluding the counties of Antrim, Armagh, Dublin, Fermanagh, BUTTER-MAKING. Limerick, Louth, and Sligo) adopted the scheme of instruction in butter-making during the past year, and employed thirty-three instructors, of whom seventeen were also engaged during portion of the year giving instructions in poultry-keeping.

During the year the instructors made 7,419 visits to private dairies, delivered 191 lectures, and conducted 3,182 dairy classes in 224 centres, with an average attendance of eight pupils.

The following statement shows the progress of the scheme during each of the five past years:—

Year	Counties	No of Instructors	No. of Lectures	No. of Centres for Classes	No. of Classes held thereat	No. of Visits to Private Dairies
1907-8	24	29	252	252	3,643	4,217
1908-9	26	30	245	227	3,595	5,918
1909-10	26	33	128	305	4,093	7,703
1910-11	27	33	152	260	3,282	6,510
1911-12	26	33	191	224	3,182	7,419

A copy of the scheme will be found in the Appendices, page [84].

This scheme, a copy of which is printed in the Appendices, page [87], was in operation in every county during the past year.

HORTICULTURE AND BEE-KEEPING. Forty instructors were employed, of whom 35 were qualified to give instruction in both horticulture and bee-keeping, two were qualified in horticulture only, and three in bee-keeping alone. In each of three counties one instructor in horticulture and a separate instructor for bee-keeping were employed.

During the year the number of visits paid to and demonstrations given at gardens, orchards, etc., by these instructors, amounted to 33,501, and in addition lectures were given by a few of the instructors. The number of such lectures was 206, and on an average 49 persons attended. 354 demonstration plots under the scheme were established in 1912, as compared with 302 in the preceding year. On the whole these plots were cultivated with care by the occupiers.

With few exceptions county committees continued to carry out an arrangement whereby they purchase trees, etc., in bulk, and re-sell them to approved applicants at cost price. In order to assist the committees in procuring trees of a reliable quality, the Department as usual inspected the stocks of the principal Irish nurseries, and notified the committees of the classes of trees approved at each nursery.

The following table indicates the extent to which trees were distributed under the foregoing arrangements during the past six years the period for which accurate figures are available:—

	1907	1908	1909	1910	1911	1912
Apples, . . .	37,198	29,652	25,804	29,731	30,392	75,909
Pears, . . .	1,970	1,773	1,342	1,321	934	1,377
Plums, . . .	2,629	2,221	1,566	1,706	1,159	2,508
Damsons, . . .	64	62	68	294	17	62
Cherries, . . .	408	204	225	86	59	144
Gooseberries, . .	12,053	13,261	8,405	8,282	7,261	7,406
Currents, . . .	8,786	7,529	7,085	5,848	5,947	11,157
Raspberries, . .	9,743	7,151	6,474	3,219	6,102	3,306
Other Fruits, . .	15,345	13,315	7,464	2,344	3,407	2,551
Forest and other trees and shrubs	288,722	426,733	623,608	424,601	560,691	410,741

From the returns furnished by the local authorities of the thirty-three counties it appears that 331

BEE PEST PREVENTION (IRELAND) ACT, 1908. cases of foul brood came under the notice of and were dealt with by the authorities in question. The under-mentioned county committees of agriculture, with the consent of the respective county councils, made provision for the payment of compensation to bee-keepers in respect of bees, etc., compulsorily destroyed under the provisions of the Act. Payments of compensation, amounting in all to £36 14s. 6d., were recommended in twelve counties.

County	Amount allocated for compensation £
ULSTER:—	
Antrim,	15
Armagh,	5
Cavan,	15
Donegal,	10
Down,	20
Fermanagh,	5
Londonderry,	—
Monaghan,	10
Tyrone,	10
MUNSTER:—	
Clare,	10
Cork,	20
Kerry,	5
Limerick,	10
Tipperary, N.R.	—
Tipperary, S.R.,	10
Waterford,	—

County	Amount allocated for compensation
LEINSTER :—	
Carlow,	—
Dublin,	—
Kildare,	10
Kilkenny,	20
King's,	15
Longford,	1
Louth,	10
Meath,	20
Queen's,	5
Westmeath,	5
Wexford,	25
Wicklow,	—
CONNACHT :—	
Galway,	5
Leitrim,	3
Mayo,	6
Roscommon,	—
Sligo,	3
TOTAL,	£273

Suspected Isle of Wight Disease in Bees.—During the year the Department received reports from two districts, one in county Dublin and one in county Down, that a disease in bees, suspected to be Isle of Wight disease, had made its appearance in a few apiaries. The Department immediately arranged to keep the district concerned in county Dublin under observation. Though several specimens have been examined, the Department are unable to confirm with certainty the presence of Isle of Wight disease. The symptoms shown by affected bees while not unlike those of Isle of Wight disease are similar to those associated with "bee paralysis" which has been known in this country for some years. In the circumstances, the Department do not consider that these outbreaks need cause any undue alarm amongst Irish bee-keepers.

As the Department have not any statutory powers to take action with regard to any disease in bees with the exception of "Foul Brood" or "Bee Pest," an endeavour is being made in the present session of Parliament to obtain facilities to enable the Department to deal with other diseases in bees, and to prohibit, if considered advisable, the importation of second-hand bee-keeping appliances into Ireland.

The scheme of prizes for cottages and small farms, printed in the Appendixes, page [65], was put into operation during 1912 in every county with the exception of Antrim, Armagh, and Carlow. The adjudications were carried out by the instructors in agriculture, none of whom acted as judge in the district in which he was employed under the scheme of instruction in agriculture.

The entries from labourers in the cottage section continue increasing from year to year.

The following table shows the number of administrative counties in which the scheme was in operation, the number of holdings entered for competition each year, and the number and the total value of the prizes awarded during the past five years :—

Year	No. of Counties	No. of Entries	No. of Prizes Awarded	Amount expended in Prizes
				£
1908, . . .	30	3,819	2,417	4,179
1909, . . .	28	4,004	2,507	4,796
1910, . . .	26	4,069	2,486	4,632
1911, . . .	30	4,800	2,758	5,048
1912, . . .	30	4,535	3,056	5,490

The special tillage prize scheme which was inaugurated by the Cork county committee of agriculture in 1907, and repeated for each year up to and including 1911, was discontinued. The Meath county committee however again offered prizes amounting to £195 for the best kept tillage farms, and nineteen holdings were entered for competition.

The following table contains particulars of the value of prizes offered and awarded, and the number of competitors for each year this special scheme has been in operation :—

County	Year	Value of Prizes offered	No. of Entries received	Amount expended in Prizes
		£		£
Cork, . . .	1907	468	124	461
	1908	468	210	468
	1909	444½	187	440
	1910	454½	126	444
	1911	519½	130	464
	1912	Scheme abandoned		
Meath, . .	1908	195	32	195
	1909	195	23	195
	1910	195	21	195
	1911	195	20	195
	1912	195	19	195

It is open to question whether a scheme of this nature results in benefit to a county commensurate with the time and money expended on it.

The Department's lecturer on veterinary hygiene visited ten counties during the year giving from 21 to 24 lectures in each. Farmers displayed considerable interest in these lectures, which were so well appreciated that requests for further lectures have been received from nearly all the counties so visited.

PIONEER
LECTURES.

(b.) IMPROVEMENT OF LIVE STOCK.

As in the previous year this scheme, particulars of which will be found in the Appendices, page [47] was adopted in every county save Sligo and Tyrone. In the case of county Tyrone, the committee provided funds for the awarding of premiums to stallions.

The following table shows the number of stallions accepted for entry in the Department's register for each of the past ten years :—

Year	Thorough-bred	Irish draught	Half-bred	Clydesdale	Shire	Total
1903, .	123	—	—	48	21	192
1904, .	140	—	—	48	23	211
1905, .	154	—	—	49	26	229
1906, .	163	—	—	50	26	239
1907, .	161	—	38	51	26	276
1908, .	156	—	50	52	24	282
1909, .	153	—	61	57	25	296
1910, .	167	—	83	63	27	340
1911, .	184	13	87	63	23	370
1912, .	192	13	105	64	22	396

Particulars of the assistance rendered by the Department by means of loans and subsidies for the purchase of stallions during the past ten years are given in the following table:—

Year	Thorough-bred		Irish Draught		Half-bred		Clydesdale		Shire		Total	
	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies
1903.	6	6	—	—	—	—	2	1	1	—	9	7
1904.	11	12	—	—	—	—	1	1	—	—	12	13
1905.	9	7	—	—	—	—	1	1	1	1	11	9
1906.	7	8	—	—	—	—	1	1	—	—	8	9
1907.	4	3	—	—	2	1	—	—	—	—	6	4
1908.	5	3	—	—	11	10	3	3	2	2	21	18
1909.	15	9	—	—	14	7	2	1	—	—	31	17
1910.	8	5	—	—	16	16	1	—	1	—	26	21
1911.	20	15	1	—	10	10	3	1	—	—	34	26
1912.	10	10	—	—	8	8	4	4	—	—	22	22

The scheme of loans for the purchase of stallions will be found in the Appendices, page [60].

The following table shows in respect of each of the past ten years (1) the total number of local exhibitions held for the purpose, (2) the number of mares selected, (3) the amount allocated for nominations, and (4) the amount actually expended:

Year	No. of Local Exhibitions of Mares held	Number of Nominations of Mares					Amount allocated for Nominations	Amount expended for Nominations
		To Thorough-bred Stallions	To Irish Draught and Half-bred Stallions	To Shire Stallions	To Clydesdale Stallions	Total		
1903.	180	1,651	—	285	658	2,594*	£ 6,933	£ 6,234
1904.	210	2,010	—	273	761	3,044*	8,371	7,158
1905.	217	2,436	—	281	758	3,475*	8,687	8,122
1906.	227	2,624	—	241	743	3,608*	8,838	8,324
1907.	227	2,325	295	218	695	3,533*	8,407	8,064
1908.	227	2,257	545	214	762	3,778*	8,642	8,092
1909.	223	1,992	645	198	733	3,568*	7,841	7,490
1910.	219	1,832	653	220	760	3,465*	7,515	7,392
1911.	229	2,638	1,235	247	1,083	5,203*	7,560	10,794
1912.	233	2,473	1,502	298	1,083	5,356†	7,594	11,786‡

* Number actually paid for. † Estimated number to be paid for.

‡ Estimated amount to be paid, which includes a sum of £5,000 provided from the Development Grant.

The arrangements made for the selection of mares for nominations in 1912 were similar to those adopted in previous years.

The special regulations for 1912 made by county committees in respect of the valuation of farmers eligible to exhibit mares for nominations were as under:—

Province and County	Limits of Valuation			
	Higher Valuation		Lower Valuation	
	Proportion of Nominations allocated	Valuation £	Proportion of Nominations allocated	Valuation £
ULSTER.				
Antrim,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	75
Armagh,	No limit	—	—	—
Cavan,	Valuation	not to exceed £50	—	—
Donegal,	Valuation	not to exceed £150	—	—
Down,	$\frac{1}{2}$	75	$\frac{1}{2}$	40
Fermanagh,	$\frac{1}{2}$ under £50; $\frac{1}{2}$ between £50 and £100.		$\frac{1}{2}$ between £100 and £150	
Londonderry,	$\frac{1}{2}$ under £20; $\frac{1}{2}$ between £20 and £40; $\frac{1}{2}$ £40 and over			
Monaghan,	$\frac{1}{2}$	100	$\frac{1}{2}$	30
Tyrone,	—	—	—	—
MUNSTER.				
Clare,	$\frac{1}{2}$	200	$\frac{1}{2}$	50
Cork, W.R.,	$\frac{1}{2}$	150	$\frac{1}{2}$	30
„ E.R.,	$\frac{1}{2}$	200	$\frac{1}{2}$	50
Kerry,	Valuation	not to exceed £100	—	—
Limerick,	Valuation	not to exceed £50	—	—
Tipperary, N.R.,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
„ S.R.,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	80
Waterford,	$\frac{1}{2}$	200	$\frac{1}{2}$	75
LEINSTER.				
Carlow,	$\frac{1}{2}$	150	$\frac{1}{2}$	50
Dublin,	$\frac{1}{2}$	300	$\frac{1}{2}$	100
Kildare,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	100
Kilkenny,	$\frac{1}{2}$	100	$\frac{1}{2}$	50
King's,	$\frac{1}{2}$	75	$\frac{1}{2}$	40
Longford,	$\frac{1}{2}$	300	$\frac{1}{2}$	50
Louth,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Meath,	$\frac{1}{2}$	150	$\frac{1}{2}$	50
Queen's,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Westmeath,	$\frac{1}{2}$	150	$\frac{1}{2}$	60
Wexford,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Wicklow,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
CONNACHT.				
Galway,	$\frac{1}{2}$	100	$\frac{1}{2}$	30
Leitrim,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	20
Mayo,	$\frac{1}{2}$	30	$\frac{1}{2}$	18
Roscommon,	$\frac{1}{2}$	80	$\frac{1}{2}$	30
Sligo,	Valuation	not to exceed £25.	—	—

The following table shows the extent to which the scheme was availed of by farmers in each of the counties concerned:—

Province and County	Number of Local Exhibitions arranged by County Committee	Number of Mares competing for free nominations	Number of Mares declared suitable by Judge and Veterinary Surgeon for free nominations.		
			Se-lected	Re-served	Total
ULSTER.					
Antrim,	6	644	302	1	303
Armagh,	4	127	81	—	81
Cavan,	8	295	147	28	175
Donegal,	13	451	206	8	214
Down,	11	387	220	2	222
Fermanagh,	6	242	98	27	125
Londonderry,	4	306	147	21	168
Monaghan,	6	276	154	11	165
Tyrone,	—	—	—	—	—
Totals for Ulster,	58	2,728	1,355	98	1,453
MUNSTER.					
Clare,	8	635	247	—	247
Cork,	18	1,062	409	28	437
Kerry,	8	614	311	—	311
Limerick,	8	515	245	31	276
Tipperary, N.R.,	4	537	190	—	190
" S.R.,	9	963	456	31	487
Waterford,	6	456	231	—	231
Totals for Munster,	61	4,782	2,089	90	2,179
LEINSTER.					
Carlow,	4	158	49	19	68
Dublin,	12	385	246	63	309
Kildare,	5	195	99	—	99
Kilkenny,	8	445	171	64	235
King's,	6	217	82	11	93
Longford,	3	249	103	29	132
Louth,	3	130	58	—	58
Meath,	8	322	176	—	176
Queen's,	5	283	130	14	144
Westmeath,	8	337	127	28	155
Wexford,	4	481	221	—	221
Wicklow,	7	453	164	11	175
Totals for Leinster,	73	3,655	1,626	239	1,865
CONNACHT.					
Galway,	12	557	212	12	224
Leitrim,	7	255	98	27	125
Mayo,	9	657	194	168	362
Roscommon,	9	267	114	59	173
Sligo,	4	98	43	19	62
Totals for Connacht,	41	1,834	661	285	946
Totals for all Ireland,	233	12,999	5,731	712	6,443

There were 12,999 mares inspected, of which 7,243 were passed by the judges as eligible for nominations, but of these the veterinary surgeons rejected 800 as unsound.

Over 66 per cent. of the nominations awarded were given to mares six years of age and under.

With the exception of counties Dublin and Meath, the county committees fixed the nomination fee at £2.

The Tyrone experimental scheme was continued in 1912. Twelve registered stallions standing for service in the county, were selected for premiums by the county committee, viz.: two thoroughbreds, five Clydesdales two shire and three half-bred. A premium of £50 was offered for each of the thoroughbred sires in consideration of serving forty mares, and £30 for the other breeds for the service of forty-five mares each. The mares, which were the property of farmers in the county, each of whose valuation did not exceed £100, were not selected at special exhibitions nor subjected to the veterinary examination required under the Department's general scheme.

The service fee payable by owners of thoroughbred sires was £1 per mare and in all other cases 10s. A total of 413 mares were served under this special scheme, viz.: 38 by thoroughbred stallions and 375 by the others.

The amounts paid in 1912 to stallion owners were as follows:—

	£	s.	d.
Part premium for two thoroughbred stallions	47	10	0
Full premiums for five Clydesdale stallions ..	150	0	0
Full premium for two shire stallions	60	0	0
Part premium for three half-bred stallions ..	40	0	0
	£297	10	0

The following table indicates the extent to which the Department made special provision in 1912 for the congested areas by placing stallions in remote districts, at a nominal service fee:—

County	Breed of Stallion	Place of Location
Kerry, . . .	*Welsh Cob, . . .	Sneem.
Do., . . .	do., . . .	Glencar.
Leitrim, . . .	Pony, . . .	Mohill.
Mayo, . . .	Half-bred, . . .	Achill Sound.
Do., . . .	*Welsh Cob, . . .	Clare Island.
Do., . . .	Thoroughbred, . . .	Achill Sound.

* Formerly the property of the Congested Districts Board.

Development Grant.—The grant of £10,000 referred to in last Annual Report was continued in 1912, and was applied to the following purposes :—

- (a) Purchase of Stallions.
- (b) Nominations of Mares.
- (c) Irish Draught Horse Scheme.

(a) The Department devoted part of the foregoing grant, supplemented by aid from the Endowment Fund, towards the cost of purchasing stallions and colts during the agricultural year ended 30th September, 1912, as follows :—From 1st October, 1911, to 31st March, 1912, the sum of £1,838 10s. was expended on the purchase of four sires, and, between 1st April and 30th September, 1912, three thoroughbred stallions and three thoroughbred yearling colts, costing £1,785, and 20 half-bred colts, costing £1,022 10s., were purchased.

(b) One-half of the entire grant (*i.e.*, £5,000) was applied for the purpose of awarding additional nominations of the value of £2 and £3 respectively, in thirty-one counties, to the extent of nearly 66 per cent. of what was already available from the committee's joint funds. In the case of county Tyrone, the proportion granted to that county was applied in extending the existing experimental scheme of premiums for stallions, and in county Sligo which had not adopted a horse scheme since 1909 the amount of the grant was calculated on the amount the committee had allocated for horsebreeding in that year. This grant, together with the sum of £7,584 (which includes £290 in county Tyrone for premiums to stallions) already provided from the joint fund represented a total of £12,584 administered by the various county committees during the past year on horse breeding in Ireland, out of which thirty-two county committees awarded a total of 5,731 nominations, and the Tyrone county committee expended £297 10s. on premiums to twelve registered stallions. Owing to the lateness in the season at which the Department were in a position to announce these extra nominations, a few committees were unable to award the full number allotted to their counties. The value of those which lapsed for the reason stated amounted to £342, representing 171 nominations.

(c) The scheme for encouraging the breeding of Irish draught horses, which was put into operation for the first time in 1911, was continued during the past year. In view of the large number of mares exhibited and inspected for the purposes of the scheme in 1911, it was not necessary to carry out a general inspection in 1912, and therefore no prizes were awarded as in the previous year. The operations under the scheme were confined merely to having the mares already on the register served by the thirteen registered stallions available for service. Of the 266 mares registered in 1911, 220 were served by the

approved Irish draught stallions in 1912. These sires stood for service in each of the counties: Carlow, Clare, Cork, Down, Kildare, Limerick, Monaghan, Queen's, Tipperary, Westmeath, and Wexford, whilst two were available for county Kilkenny.

Arrangements similar to those which obtained in 1911 were again made in 1912 for having the mares served, *i.e.*, the stallion owners undertook to keep the mares during service and for the usual number of trials afterwards. All expenses, *e.g.*, service fees, carriage of mares to and from stud, and keep of mares, were defrayed by the Department. The cost of carrying out this scheme in 1912 amounted to £1,380.

As in previous years the Department again made provision for poor districts in which donkeys are largely used, by locating forty stallion asses with caretakers, who were held responsible for the proper care and treatment of the animals while in their possession.

These asses were placed as follows:—

County	District in which Located	County	District in which Located
Cavan, . . .	Ballinagh.	Kerry . . .	Ballyheigue.
Clare, . . .	Kilnaboy.	Do., . . .	Tuost.
Cork, . . .	Macroon.	Do., . . .	Ballinaskelligs.
Do., . . .	Skibbereen.	Do., . . .	Ballylongford.
Donegal, . .	Donegal.	Do., . . .	Kells.
Do., . . .	Bruckless.	Leitrim, . .	Cloone.
Do., . . .	Bundoran.	Do., . . .	Mohill.
Do., . . .	Arranmore Island.	Do., . . .	Ballinamore.
Down, . . .	Strandtown.	Do., . . .	Drumlish.
Fermanagh, .	Enniskillen.	Mayo, . . .	Kilbelly.
Galway, . . .	Loughrea.	Do., . . .	Westport (two).
Do., . . .	Ballygar.	Do., . . .	Ballina.
Do., . . .	Ballymacward.	Do., . . .	Kiltinagh.
Do., . . .	Tuam.	Roscommon, .	Donamon.
Do., . . .	Athenry.	Do., . . .	Ballaghaderreen.
Do., . . .	Recess.	Do., . . .	Kilroosky.
Do., . . .	Oughterard.	Do., . . .	Ballydangan.
Kerry, . . .	Lixnaw.	Do., . . .	Ballinagone.
Do., . . .	Caherdaniel.	Sligo, . . .	Dromard.
Do., . . .	Valencia Island.		

The cattle-breeding scheme printed in the Appendices, page [53], was in operation in every county CATTLE-BREEDING. during the past year.

The value of the premium for Kerry, Dexter, Galloway, and Registered Dairy bulls was fixed at £10, whilst for other approved breeds the committees were empowered to determine the value of the premium between the limits of £10 and £15. In Antrim the premium was fixed at £12 for all breeds, in Longford at £12 10s. for bulls purchased prior to

1910, and £15 for others, and in Roscommon at £15 for shorthorns, and £12 for other breeds. All the remaining committees awarded premiums of £15 each.

The following table shows the number of loans, for the purchase of bulls, granted in each of the past ten years:—

Year.	No. of Loan.			
1903,	105			
1904,	122			
1905,	147			
1906,	135			
1907,	181			
1908,	140			
1909,	174			
1910,	209			
1911,	213			
1912,	208			

The following table shows by breeds how the bulls sold under the loan scheme in 1912 were distributed:—

County	Short-horn	Aberdeen Angus	Hereford	Galloway	Registered Dairy	Kerry	Total
Carlow,	2	3	—	—	1	—	6
Cavan,	3	1	—	—	—	—	4
Claro,	5	2	—	—	—	—	7
Cork,	14	—	—	—	2	—	16
Donegal,	9	10	—	2	—	—	21
Down,	1	—	—	—	—	—	1
Dublin,	2	1	—	—	—	—	3
Fermanagh,	1	2	—	—	—	—	3
Galway,	12	3	2	1	—	—	18
Kerry,	7	6	—	—	—	—	13
Kildare,	1	1	—	—	—	—	2
Kilkenny,	7	1	—	—	2	—	10
King's,	3	1	—	—	—	—	4
Leitrim,	5	4	1	—	1	—	11
Limerick,	2	2	—	—	1	—	5
Longford,	1	1	—	—	—	—	2
Louth,	3	—	1	—	—	—	4
Mayo,	6	9	—	4	—	—	19
Meath,	1	1	—	—	—	—	2
Monaghan,	1	—	—	—	—	—	1
Queen's,	3	—	—	—	1	—	4
Roscommon,	6	—	1	—	—	—	7
Sligo,	11	—	—	—	—	—	11
Tipperary,	7	3	3	—	1	—	14
Tyrone,	1	—	—	—	—	—	1
Waterford,	1	5	—	—	—	—	6
Westmeath,	—	—	1	—	—	—	1
Wexford,	4	2	—	—	—	—	6
Wicklow,	1	5	—	—	—	—	6
	120	63	9	7	9	—	208

During the past three years the county committees allocated for, and actually expended upon, premiums for bulls the following amounts :—

Year	Amount allocated	Amount expended
1910,	£13,302	£12,221
1911,	13,535	12,600
1912,	13,777	13,029*

* Estimated.

Provision was made by the committees for the award of 944 premiums in 1912. There were 747 bulls which held premiums in 1911 eligible to compete for premiums in 1912. Local exhibitions were held at 483 centres, at which 590 of these 747 animals were shown and examined by the Department's inspectors. Of this number, 579 were considered suitable for the renewal of premiums in 1912, but only 559 were actually awarded premiums, the others being for various reasons withdrawn. Applicants were selected by the county committees to take up the balance of the premiums available.

Ninety-five per cent. of the premiums provided for were actually awarded. In Ulster, 98 per cent.; in Leinster, 99 per cent.; in Connacht, 95 per cent.; and in Munster, 84 per cent. of the total number of bulls for which provision was made were procured.

Table showing the ages and breeds of bulls selected for and awarded premiums under the scheme as administered by the county committees during each of the past ten years :—

Year	Ages				Breeds				Total No. of Bulls awarded Premiums
	Yearlings	Two-year-olds	Three-year-olds	Four-year-olds	Short-horn	Aberdeen Angus	Hereford	Other Breeds	
1903, .	402	216	—	—	473	78	58	9	618
1904, .	334	315	85	—	557	99	63	15	734
1905, .	276	299	186	34	599	104	68	24	795
1906, .	302	251	196	72	617	117	67	20	821
1907, .	282	281	178	72	604	122	61	26	813
1908, .	268	267	205	60	600	123	61	16	800
1909, .	295	247	200	70	579	134	78	21	812
1910, .	324	285	164	65	578	159	75	26	838
1911, .	309	306	202	49	580	178	75	33	866
1912, .	302	303	209	83	585	199	69	44	897*

* Number of premiums provisionally awarded.

The following table shows by province and county how the premiums were distributed among the breeds selected by the county committees to stand for premiums in 1912 :—

County	Short-horn	Aber-deen Angus	Here-ford	Gallo-way	Kerry	Regis-tered Dairy	Totals
ULSTER :							
Antrim, . . .	50	1	—	3	—	4	58
Armagh, . . .	29	2	—	—	—	—	31
Cavan, . . .	18	5	5	—	—	—	28
Donegal, . . .	23	11	—	3	—	—	37
Down, . . .	51	15	—	—	—	2	68
Fermanagh, . . .	13	12	—	—	—	—	25
Londonderry, . . .	27	3	—	—	—	3	33
Monaghan, . . .	20	—	—	—	—	1	21
Tyrone, . . .	41	6	—	1	—	2	50
Totals for Ulster, . . .	272	55	5	7	—	12	351
MUNSTER :							
Clare, . . .	16	3	—	—	—	—	19
Cork, . . .	42	16	—	—	—	—	58
Kerry, . . .	11	19	—	—	2	—	32
Limerick, . . .	8	3	—	—	—	5	16
Tipperary (N.R.), . . .	8	4	2	—	—	1	15
Tipperary (S.R.), . . .	8	4	5	—	—	3	20
Waterford, . . .	6	8	—	—	—	—	14
Totals for Munster, . . .	99	57	7	—	2	9	174
LEINSTER :							
Carlow, . . .	3	5	—	—	—	3	11
Dublin, . . .	8	3	4	—	—	—	15
Kildare, . . .	18	4	2	—	—	1	25
Kilkenny, . . .	26	2	—	—	—	4	32
King's, . . .	14	2	3	—	—	—	19
Longford, . . .	4	3	3	—	—	—	10
Louth, . . .	10	3	3	—	—	1	17
Meath, . . .	17	4	9	—	—	—	30
Queen's, . . .	12	3	1	—	—	1	17
Westmeath, . . .	7	2	18	—	—	1	28
Wexford, . . .	23	4	—	—	—	—	27
Wicklow, . . .	9	11	—	—	—	—	20
Totals for Leinster, . . .	151	46	43	—	—	11	251
CONNACHT :							
Galway, . . .	27	2	5	1	—	—	35
Leitrim, . . .	3	9	—	—	—	1	13
Mayo, . . .	12	14	—	1	—	—	27
Roscommon, . . .	10	4	8	—	—	—	22
Sligo, . . .	11	12	1	—	—	—	24
Totals for Connacht, . . .	63	41	14	2	—	1	121
Totals for Ireland, . . .	585	199	969	9	2	33	897

The following table shows, by provinces and counties, the distribution of premium bulls in 1912:—

Province and County	Number of Premiums provided by County Committee for 1912	Number of Bulls continued from 1911	Number of Bulls provisionally awarded Premiums for first time in 1912	Total Number of Bulls approved for Premiums in 1912
ULSTER:				
Antrim,	62	21	37	58
Armagh,	31	22	9	31
Cavan,	28	15	13	28
Donegal,	37	23	14	37
Down,	69	42	26	68
Fermanagh,	26	15	10	25
Londonderry,	33	20	13	33
Monaghan,	22	13	8	21
Tyrone,	50	27	23	50
Totals for Ulster,	358	198	153	351
MUNSTER:				
Clare,	20	14	5	19
Cork,	65	40	18	58
Kerry,	34	26	6	32
Limerick,	37	10	6	16
Tipperary (N.R.),	16	10	5	15
Tipperary (S.R.),	20	10	10	20
Waterford,	15	7	7	14
Totals for Munster,	207	117	57	174
LEINSTER				
Carlow,	11	5	6	11
Dublin,	15	7	8	15
Kildare,	25	16	9	25
Kilkenny,	32	19	13	32
King's,	19	14	5	19
Longford,	10	7	3	10
Louth,	17	10	7	17
Meath,	31	23	7	30
Queen's,	17	10	7	17
Westmeath,	28	23	5	28
Wexford,	27	18	9	27
Wicklow,	20	13	7	20
Totals for Leinster,	252	165	86	251
CONNACHT:				
Galway,	35	20	15	35
Leitrim,	15	9	4	13
Mayo,	28	20	7	27
Roscommon,	25	13	9	22
Sligo,	24	17	7	24
Totals for Connacht,	127	79	42	121
Totals for Ireland,	944	559	338	897

The following is a summary of the regulations for 1912 made by each county committee in regard to qualifications of cow-owners and amount of service fee :—

Province and County	Qualification of cow owners as to valuation and service fee as fixed by County Committees
ULSTER :	
Antrim,	£100. 1/- fee in all cases.
Armagh,	£20 for 1/- fee. Unlimited for 2/6 fee.
Cavan,	£50. 1/- fee in all cases.
Donegal,	£150. Three-fourths of the prescribed number of cows to belong to farmers under £20 valuation. 1/- fee in all cases.
Down,	£40 for 1/- fee. £75 for 2/6 fee.
Fermanagh,	£15 for 1/- fee. £100 for 2/6 fee.
Londonderry,	No limit. 1/- fee in all cases.
Monaghan,	£40 for 1/- fee. £100 for 2/6 fee.
Tyrone,	£50 for 1/- fee. £100 for 2/6 fee.
MUNSTER :	
Clare,	£75. 1/- fee in all cases.
Cork,	£150 in West Riding and £200 in East Riding. 1/- fee in all cases.
Kerry,	£20 for 1/- fee. £100 for 2/6 fee.
Limerick,	£30 for 1/- fee. Unlimited for 2/6 fee.
Tipperary, N.R.,	£30 for 1/- fee. £125 for 2/6 fee.
Tipperary, S.R.,	£30 for 1/- fee. Unlimited for 2/6 fee.
Waterford,	£50 for 1/- fee. £150 for 2/6 fee.
LEINSTER :	
Carlow,	£100 for 1/- fee. £200 for 2/6 fee.
Dublin,	No limit. 1/- fee in all cases.
Kildare,	£75 for 1/- fee. £150 for 2/6 fee.
Kilkenny,	£50 for 1/- fee. £100 for 2/6 fee. All cows provisionally selected or registered under Dairy Cattle Scheme to be served at 1/- fee.
King's,	£100. 1/- fee in all cases.
Longford,	£100. 1/- fee in all cases.
Louth,	£25 for 1/- fee. £100 for 2/6 fee.
Meath,	£50 for 1/- fee. £100 for 2/6 fee.
Queen's,	£40 for 1/- fee. £100 for 2/6 fee.
Westmeath,	£50 for 1/- fee. £100 for 2/6 fee.
Wexford,	£100. 1/- fee in all cases.
Wicklow,	£100 for 1/- fee.
CONNACHT :	
Galway,	£30 for 1/- fee.
Leitrim,	£20 for 1/- fee. Unlimited for 2/6 fee.
Mayo,	£18. 1/- fee in all cases.
Roscommon,	£30. 1/- fee in all cases.
Sligo,	£25. 1/- fee in all cases.

The Department again supplemented the cattle-breeding scheme, as administered by the committees of counties containing congested areas, by placing a number of bulls for service in congested districts. Particulars of the terms on which such bulls are placed are given at pages 48 and 49 of the Ninth Annual Report.

The following figures show the extent of the supplemental aid given by the Department in this manner during 1912:—

County	No. of Special Premiums in 1912	No. of Bulls sold at reduced prices during 1912	No. of Bulls sold at reduced prices in previous years and retained for service in 1912	Total
Clare, . . .	8	—	—	8
Cork, . . .	14	3	1	18
Donegal, . . .	40	3	6	49
Galway, . . .	21	9	26	56
Kerry, . . .	40	4	2	46
Leitrim, . . .	14	—	—	14
Mayo, . . .	31	7	21	59
Roscommon, . . .	10	—	—	10
Sligo, . . .	13	—	—	13
Totals, . . .	191	26	56	273

The figures for each year since 1904, when the Department's operations were first extended to congested districts, are given in the following table:—

Year	Number of Special Premiums granted by the Department for Congested Districts	Number of Bulls sold at reduced prices to residents in Congested Districts
1904, . . .	8	—
1905, . . .	33	—
1906, . . .	51	25
1907, . . .	81	30
1908, . . .	95	31
1909, . . .	106	27
1910, . . .	133	35
1911, . . .	168	22
1912, . . .	191	26

There were thus, in addition to 897 bulls standing under the county schemes, 273 animals placed under special arrangements making a total of 1,170 bulls (*i.e.*, 66 more than 1911) standing in Ireland under the cattle breeding scheme in the season 1912.

The regulations of the swine-breeding scheme are printed at page [57] of the Appendices.

Boars which held premiums for the first time in 1911 were eligible for inspection with a view to being

SWINE-BREEDING. awarded second year premiums in 1912.

Such boars were inspected at the same centres as bulls, and 167 of the 169 presented for inspection were passed as suitable for premiums; of these 162 stood for service in 1912. The county committees selected applicants to take up the balance of the premiums.

The Department during the past year, on behalf and at the request of applicants selected to keep premium boars, purchased from Irish breeders 175 boars suitable for the purposes of the scheme.

The number of premiums awarded in 1912 by each county committee was as follows:—

County	No. of First year premiums	No. of Second year premiums	Large White Yorks	Large Blacks	White Ulster	Total
ULSTER:						
Antrim,	8	7	—	—	15	15
Armagh,	4	5	—	2	7	9
Cavan,	10	7	1	—	16	17
Donegal,	8	2	1	—	9	10
Down,	10	6	1	—	15	16
Fermanagh,	4	4	1	—	7	8
Londonderry,	9	4	1	—	12	13
Monaghan,	8	3	—	—	11	11
Tyrone,	7	5	—	—	12	12
Totals for Ulster,	68	43	5	2	104	111
MUNSTER:						
Clare,	5	6	11	—	—	11
Cork,	20	10	30	—	—	30
Kerry,	9	9	18	—	—	18
Limerick,	2	3	5	—	—	5
Tipperary (N.R.),	7	4	11	—	—	11
Tipperary (S.R.),	6	—	6	—	—	6
Waterford,	4	—	4	—	—	4
Totals for Munster,	53	32	85	—	—	85
LEINSTER:						
Carlow,	—	3	1	1	1	3
Dublin,	—	2	2	—	—	2
Kildare,	2	5	6	—	1	7
Kilkenny,	8	4	12	—	—	12
King's,	10	5	12	—	3	15
Longford,	6	4	5	4	1	10
Louth,	3	3	2	—	4	6
Meath,	4	1	4	1	—	5
Queen's,	8	3	10	—	1	11
Westmeath,	5	2	2	3	2	7
Wexford,	10	10	15	5	—	20
Wicklow,	3	3	6	—	—	6
Totals for Leinster,	59	45	77	14	13	104
CONNACHT:						
Galway,	15	14	29	—	—	29
Leitrim,	3	3	3	3	—	6
Mayo,	18	12	30	—	—	30
Rooscommon,	9	8	12	5	—	17
Sligo,	9	5	13	—	1	14
Totals for Connacht,	54	42	87	8	1	96
Totals for Ireland,	234	162	254	24	118	396

The following is a summary of the operations of the scheme during the past ten years :—

Year	Money allocated by County Committees for Boar Premiums	Money expended by County Committees for Boar Premiums	Number of Premiums awarded by County Committees	Number of Special Premiums provided by Department for Congested Districts	Total number of Boars standing in Ireland during Service Season
	£	£			
1903, .	2,530	879	181	—	181
1904, .	2,070	624	129	—	129
1905, .	1,740	840	205	10	215
1906, .	1,588	1,141	269	23	292
1907, .	1,618	1,171	287	51	338
1908, .	1,670	1,146	281	49	330
1909, .	1,700	1,252	310	49	359
1910, .	1,694	1,419	336	80	416
1911, .	1,801	1,638	390	97	487
1912, .	1,992	1,665*	396*	106*	502*

* Estimated.

In addition to the boars in respect of which premiums were payable by the county committees, the Department arranged for the payment, out of their own funds, of premiums for one hundred and six boars standing for service in counties containing congested districts.

The following table shows the number of such boars located in each of the counties concerned during 1912 :—

County	No. of First year premiums value £5	No. of Second year premiums value £3	Total
Clare, . . .	3	5	8
Cork, . . .	4	2	6
Donegal, . . .	8	4	12
Galway, . . .	17	6	23
Kerry, . . .	5	6	11
Leitrim, . . .	—	1	1
Mayo, . . .	15	9	24
Roscommon, . . .	6	4	10
Sligo, . . .	7	4	11
Totals, . . .	65	41	106

The committees of counties Down and Tyrone again made provision for the location of rams in sheep-breeding districts in those counties, and for this purpose they purchased ten and three rams respectively.

The number of rams distributed by the Department at reduced prices to residents in congested districts during the past eight years was as follows:—

Year.	No. of Rams.			
1905,	15
1906,	79
1907,	117
1908,	96
1909,	102
1910,	93
1911,	100
1912,	127

Provision was made for awarding prizes for sheep at all live stock shows, other than shows confined to horses, subsidised by county committees.

Particulars of the scheme of subsidies to shows will be found in the Appendices at page [63]. The Department are pleased to note a continued improvement on the part of show societies and other bodies applying for grants in regard to the observance of the regulations under the scheme. The requirements in connection with the transmission to the committees of applications for subsidies and particulars of finances are, in most instances, duly complied with and the prize schedules are submitted in proper form prior to publication.

The scheme of 1911-12 contained special regulations in regard to the provision by certain show societies of classes for Irish draught mares on the Department's register and for the progeny of such mares by Irish draught stallions, as well as for classes for registered dairy cows and their progeny.

The following table shows the progress of the scheme during the past ten years:—

Year	Subsidies granted to Shows		Skilled Labour Competitions (Ploughing Matches, etc.)		Local Competitions (Poultry Trussing, Butter-making, etc.)	
	Number	Amount	Number	Amount	Number	Amount
		£ s. d.		£ s. d.		£ s. d.
1903, .	121	6,233 1 11	—	—	—	—
1904, .	123	6,384 14 0	—	—	10	49 2 6
1905, .	126	6,295 16 6	—	—	56	106 10 10
1906, .	147	6,728 18 7	16	117 15 0	50	109 8 5
1907, .	142	6,876 15 0	34	206 16 8	35	95 6 8
1908, .	152	6,697 8 8	47	243 0 0	45	99 14 1
1909, .	146	6,746 9 0	59	265 14 7	58	112 2 0
1910, .	135	6,112 18 7	59	259 18 0	2	30 18 6
1911, .	141	5,948 6 8	71	313 3 4	—	—
1912, .	152	5,919 0 6	78	357 4 6	—	—

In addition to the foregoing provision the Department in 1912 made supplementary grants from their own funds for the purpose of providing prizes for dairy cattle, poultry trussing, poultry plucking, and butter-making. Show societies in the following counties offered prizes accordingly, viz.:—Antrim, Cork, Kilkenny, Limerick, Londonderry, Monaghan, Tyrone, and Waterford. The total sum awarded in prizes was £167.

The Department also provided funds to cover the cost of carrying out trials of some of the more modern kinds of farm implements, such as haymaking machines, potato diggers, manure distributors, etc. Demonstrations of this nature were successfully conducted by the Royal Ulster Agricultural Society and the Munster Agricultural Society.

(c) SPECIAL INVESTIGATIONS.

FIELD EXPERIMENTS AND DEMONSTRATIONS.	Particulars of the field experiments carried out by itinerant instructors in agriculture during the year 1911-12 are given in Division A. of the scheme of agricultural experiments, and in the new scheme of field manurial experiments which appear on pages [108] and [115] respectively of the Appendices.
---	--

The original series of manurial experiments, the object of which was to ascertain the most suitable combinations of manures for the different farm crops, was introduced in 1902 and slightly modified in 1906, 1910, and 1911. The superiority of the results from certain manurial mixtures was so uniform throughout the period during which this series was conducted that further repetition of the tests was not considered necessary after 1911.

A second series of manurial experiments, introduced with a view to determining, in the case of the mixtures which had given the best results in the first series, the most advantageous proportions in which the several ingredients should be mixed, was begun in 1908, and is, with slight alterations and additions made in 1910, 1911, and 1912, at present in operation.

A supplementary series of new experiments was begun in 1912. This series embraces experiments (a) with different combinations of manures on peat soils in the cases of oats, mangels, potatoes, turnips, and meadow hay; (b) to ascertain the value of seaweed as compared with farmyard manure on potatoes; and (c) to test different forms of lime applied to stubble after lea oats.

Special experiments for the purpose of ascertaining the value of different nitrogenous manures were continued in 1912. Experiments in the cultivation of sugar beet were also continued, twelve such experiments being arranged. The results of these experiments and also of the experiments with nitrogenous manures are being prepared for publication. The results of the experiments of both the above kinds carried out in 1911 were duly published. Experiments bearing on

problems of local interest were also undertaken by the agricultural instructors in many instances.

Slight changes in the tests of varieties of seeds have been made from time to time, those varieties which have been sufficiently tested being omitted, and new varieties being added when necessary.

The number of experiments of each class undertaken by the itinerant agricultural instructors in respect of each of the principal farm crops in 1911 and 1912 is given in the following table:—

Crop	Manurial Experiments		Variety of Seed Experiments		Other Tests		Totals	
	1911	1912	1911	1912	1911	1912	1911	1912
Potatoes, .	86	91	71	66	47	46	204	203
Turnips, .	97	102	37	45	—	—	134	147
Mangels, .	55	47	37	34	—	—	92	81
Oats, .	36	35	21	28	—	—	57	63
Wheat, .	—	—	13	17	—	—	13	17
Barley, .	2	—	11	10	—	—	13	10
Hay, .	16	38	—	—	—	—	16	38
Miscellaneous	83	78	9	27	41	40	133	145
Totals .	375	391	190	227	88	86	662	704

The number of demonstration plots laid down by the instructors in agriculture in 1911 and 1912 were 2,124 and 2,113 respectively.

The results of the experiments, under the general scheme, conducted in the year 1911, were published in the Department's JOURNAL and afterwards circulated in pamphlet form. The results of the 1912 experiments are being prepared for publication.

In addition to the above-mentioned experiments, special large scale experiments in the growing of wheat, barley, and oats were conducted by the Department. Particulars of these experiments are given below.

Manurial experiments (3rd series, 3rd year) were carried out in 1911 at ten centres and reliable

FLAX GROWING. returns were obtained from nine centres.

Full details of these trials together with particulars of experiments with seed imported directly from Russia and Holland, as against Riga and Dutch brands commonly sold in Ulster, and also trials of other foreign and home-grown seed will be published in an early issue of the Department's JOURNAL and also in leaflet form.

The produce from the 1912 flax plots—manurial experiments and seed trials—will be scutched during the 1912-13 season.

The sowing of seed on a relatively large scale from selected plants of Irish grown crops was again continued. One crop from seed so selected in 1910 and sown in 1911 proved much

superior to that from high class imported seed. The results from selection were not however uniform, and in connection with these experiments many difficulties have been met with, notably, the serious injury to its vitality suffered by seed, apparently well saved and dry, during the period elapsing between its cleaning and sowing.

Early in 1912 there was issued for the guidance of flax-growers, etc., a leaflet containing a summary of the information collected by the Department as to the flax seed harvest in Russia and Holland.

During the year under review no new flax society was established. The services of two of the Department's flax experts were placed at the disposal of five societies. There were also numerous requests by private scutchmill owners and flax growers for the advice of these experts, and, as far as possible, attention was paid to such requests.

The Department's two flax instructors for Cork and Mayo were retained. In both districts where the instructors were engaged a greatly increased area under the flax crop was reported, and an assistant instructor was employed during the spring and summer months in county Cork.

Grants towards the payment of the wages of northern scutchers were afforded to two mill-owners in county Cork, on condition that such hands gave instruction to local workers. Financial assistance was also granted to a mill-owner in county Cork, to another in county Mayo, and to a third in an outlying district of county Donegal, to enable them to secure the services of approved mill foremen who taught local workers.

The eight flax apprentices selected by competitive examination in the autumn of 1911 satisfactorily completed their year's course of training in the various operations connected with the saving of seed, sowing, retting, scutching, handling and marketing of flax under the supervision of a scutchmill owner and extensive flax grower near Coleraine, and in simple chain surveying at one of the Department's agricultural stations. A ninth apprentice who had an extensive previous experience of scutching, was given a special short course of training in the scutchmill, and subsequently went through the ordinary out-door course with the other apprentices. He was engaged as mill-foreman prior to the completion of his course. At the time of writing arrangements are in an advanced stage for the location of seven of the eight ordinary apprentices in districts where it is probable the area under flax may be greatly extended, or where the flax-growing industry is capable of much improvement. It is proposed to retain the services of the remaining apprentice for experimental work.

An officer of the Department attended meetings called in three towns by persons or associations interested in the improvement or establishment of open flax markets. In only one of these towns was the project taken up enthusiastically by the

local growers and mill-owners. The marketing arrangements for flax grown in county Cork have also received attention by the Department.

In county Down during the 1911-12 scutching season, £158 was paid by the county agricultural committee in prizes at seven shows for scutched flax. Under section B of the Department's scheme for improvement in the flax growing industry, the committees of counties Cork, Monaghan, and Tyrone offered prizes for flax on foot during 1912. The total number of entries received for these prizes was 529, and a sum of £172 2s. 6d. was awarded.

A copy of the Department's scheme will be found at page [67] of the Appendices.

Experiments with the cultivation of early potatoes were continued at Dungarvan, county Waterford. Similar experiments were also carried out in North Sligo where the growers have formed an association. The season

EARLY POTATO GROWING.

was extremely favourable for the growth of this crop, and digging commenced generally several days earlier than in previous years. Excellent returns were obtained by most growers.

The system of marketing early potatoes in chip baskets, which was introduced in 1911, was continued in 1912 on a much larger scale with results which were entirely satisfactory to the growers. Potatoes thus marketed were sold at prices fixed in advance for deliveries during stated periods. The baskets, which were filled to hold 14 lbs. net weight of potatoes, were delivered by retailers to householders as they had been packed by the growers, and were plainly marked as "Grown in Ireland." They, therefore, constituted a widely spread advertisement of Irish produce. This system of marketing early potatoes in chip baskets is likely to develop considerably. It is one which should be adopted only (1) where care will be taken to grade the potatoes, to fill each chip honestly, to handle the chips in such a manner that they will present a neat appearance on the market, and (2) when the potatoes so marketed can be sold at prices fixed in advance. On the whole, the grower who has only a very small area under early potatoes will probably do well to sell his estimated minimum output at a price fixed in advance, and to take his chance on the market for the balance. It would certainly be best for such persons to form themselves into associations for the purpose of buying seed potatoes, artificial manures, and the barrels or baskets required for forwarding their produce, and also for the purpose of uniting in the sending of the produce to market.

In some cases in which the chip basket system did not appear to be the most suitable, sales of early potatoes packed in barrels and hampers at prices fixed in advance were also carried through with the Department's assistance.

Experiments on sugar beet growing were carried out in 1911 by eight agricultural instructors. The SUGAR BEET. trials were of a relatively simple nature and were planned with a view to affording information as to the yield and quality of roots grown close together in rows on the flat, compared with those of roots grown wider apart on drills or ridges. The results from the eight centres were fairly uniform and the average returns show yields per statute acre of:—

18 tons 15 cwts.	of roots (gross weight)	on drills.
20 tons 8 cwts.	" " (" ")	on the flat.
14 tons 3 cwts.	" " (factory weight)	on drills.
17 tons 8 cwts.	" " (" ")	on the flat.

and sugar contents of:—

18.2 per cent.	in the crops grown	on drills.
18.7 per cent.	" " "	on the flat.

Both yields and sugar contents were high and were probably beneficially influenced by the hot, sunny weather experienced in the 1911 season, particularly in the late summer; the plots, too, were relatively small (one-tenth statute acre) and were very well cultivated, if not especially well tilled. Full details of the experiments were published in the Department's JOURNAL and also in pamphlet form.

In 1912 experiments with sugar beet were carried out by twelve agricultural instructors. It was thought possible that the growing of this crop on moulded up drills would on the whole prove more satisfactory in Ireland than the system of growing it on the flat, so consistently urged on the continent and in Great Britain. It is hoped that the 1912 trials will afford information on this point, and also as to the advisability of top-dressing the crop with nitrate of soda. At the time of writing the results are not available.

Barley.—For some years past the Department have conducted extensive selection experiments with CEREAL barley with a view to isolating more productive strains than those at present in EXPERIMENTS. cultivation. Preliminary trials with one

of these selections, *i.e.*, Archer 2, in 1911, had shown its superiority to the strain of Archer originally raised by the Department in 1904 and distributed in the country for the past six years. It was therefore with a view to testing the values of Archer 1 and Archer 2 in the field that the trials in 1912 were formulated. A new hybrid barley, named "145," raised in England by Mr. E. S. Beaven, Warminster, was included in the trials. This hybrid is a cross between a Goldthorpe and an Archer barley, and possesses several new features of considerable value.

The experiments were conducted in duplicate acre plots at

one centre in each of the counties of Cork, Kildare and Louth. The results obtained indicated a slight superiority in yield of Archer 2 as compared with Archer 1, and, in addition, a slightly higher quality. At one centre the variety "145" returned a heavier yield than either of the Archers, but was inferior to them at the other two.

The propagation of pure seed supplies of desirable varieties has been continued on the lines laid down in 1905, but, in order to supply pure seed growers with larger initial stocks of seeds, more extensive field plots of the different barleys were cultivated at Ballinacurra in 1912. The produce of the field plots at Ballinacurra in 1911 was sown in extension plots in the counties of Kildare, Kilkenny and Tipperary in 1912, and such of the produce as was suitable for seed has been secured and retained for this purpose.

The selection and propagation of plants in the cereal cage at Glasnevin was continued. Several varieties raised in this manner were tested quantitatively in the Ballinacurra cereal cage, along with some new hybrid barleys raised in England.

The varieties which prove the most promising in these trials will be further tested in field plots in 1913.

The propagation of hybrid barleys raised by the Department in 1908 has been continued in the Glasnevin cereal cage, and all suitable forms obtained therefrom will be sown in garden plots at Ballinacurra in 1913.

A detailed report of the results of the field experiments of 1912 is in course of preparation.

Wheat.—Owing to the difficulty of obtaining pure seed for the field tests, the work in this section has been confined to pure selection and seed raising experiments.

The field plots grown at Ballinacurra were extended as in the case of barley, and for the same reason. The produce raised in 1911 was distributed to seed growers in counties Carlow and Tipperary, and arrangements were made to secure the utilisation of the produce therefrom as seed in 1912-13.

The initial stages in the propagation of pure seed were conducted at Glasnevin, and the seed obtained will be sown in garden plots at Ballinacurra in 1913. Similarly, the produce of garden plots at Ballinacurra in 1911 was sown in field plots, and the produce from these latter has all been secured for distribution as seed to pure seed growers either this autumn or in the spring of 1913.

The following French wheats—Sensation, Treasure, Dreadnought, Red Marvel, Perfection, White Marvel; the Danish wheats—Queen Wilhelmina, Tystofte Small Wheat, and Danish Square Head; and also Red Fife, Burgoyne's Fife, Little Joss and April Red—were tested in field plots on the Albert Agricultural College farm, Glasnevin.

A detailed account of these tests will be included in the annual report on the wheat experiments which is in course of preparation.

Oats.—The produce of field plots of different pure cultures sown at Ballinacurra in 1911 was distributed to pure seed growers in counties Dublin, Londonderry, and Tipperary to be sown in extension plots in 1912. The produce of such plots has been secured and will be distributed for seed in the spring of 1913.

Pure cultures raised in the Glasnevin cage in 1911 were sown in garden plots at Ballinacurra in 1912, and the produce of the garden plots at the latter place in 1911 was sown in field plots. The produce of all the field plots will be utilised for sowing extension plots in different counties in 1913.

Quantitative tests with two varieties were conducted in the Ballinacurra cereal cage.

The rapid development of the pure seed branch of the Department's Plant Breeding Division had outrun the accommodation and facilities for dealing with the work, and it was accordingly decided, in 1911, to provide suitable permanent buildings and machinery at Ballinacurra, county Cork, where so much of the cereal breeding work has been in progress for the past ten years.

The building and equipment of the granary were completed in the year under review. Provision has been made to thresh every plot with the minimum risk of admixture with other varieties. Specially constructed winnowing and screening machines, all power-driven, have been installed, and provision made for drying the grain artificially so that it may be in a fit condition to be stored in bins or iron drums immediately after threshing. Twenty steel bins, each capable of holding 20 barrels of corn, all hoppers to allow of the ready movement of the grain from the bins as needed, complete the equipment.

In addition to the buildings, large wired-in enclosures have been erected, one at Glasnevin and the other at Ballinacurra, and in these all the initial stages of pure line cultivations are conducted.

The total area planted in connection with this experiment and at present supervised by resident horticulturists amounts to 199 acres as
FRUIT AS A FARM CROPEXPERIMENT. under :—

	Acres
Piltown, Co. Kilkenny,	40
Clonmel, Co. Tipperary,	39
Broadway, Co. Wexford	20
Dungarvan, Co. Waterford,	20
Newmarket-on-Fergus, Co. Clare,	20
Mountbellew, Co. Galway,	20
Moneymore, Co. Londonderry,	20
Ballymoney, Co. Antrim,	20

At the Clonmel centre, which was established last winter 6,700 trees have been planted.

The Department have discontinued the system, which

was limited to this experiment, of defraying part of the cost of trees planted at a few selected centres and, with a view to encouraging the plantation of fruit trees, particularly apples, on a commercial scale, they have arranged to grant loans on easy terms to associations of fruit growers in any district in Ireland. Particulars of the conditions on which such loans are available will be found on page [105] of the Appendices.

Large Scale Experiments.—The area cropped at each experimental centre in 1912 is shown in the following table :—

	Acres.
Randlestown, county Meath,	20
Athlumney, "	10
Duleek, "	1½
Smarmore, county Louth,	18
Mullagh and Mullacrew, King's county,	14
Talbotsinch, county Kilkenny	7
Tagoat, county Wexford,	13
Cordangan, county Tipperary	10
Adare, county Limerick,	12
Total,	105½

Grants for the conduct of these experiments, at the rate of £50 per acre, are allowable for 99½ acres. The extra six acres were grown under ordinary licence, and no grants are payable on account of them. The results will, however, be included with those from the area in respect of which subsidy is paid.

Small Growers' Experiments.—This scheme, which has been in operation since 1910, was instituted with a view to testing the suitability of tobacco as a crop for small farms. Fourteen acres were grown under the scheme in 1911 by 17 small growers. The experiments were further extended in 1912, the area planted being as follows :—

	Acres.
Randlestown centre, 45 small growers,	48
Adare, " 3 " "	2½
Athlumney, " 5 " "	4½
Smarmore, " 1 " "	1

The issue of the Department's JOURNAL for April, 1912, contains a report bringing the results of the work down to the end of the season 1911.

The Treasury have approved of advances being made from the Development Fund for the purpose of a further experiment on a commercial scale in tobacco cultivation in Ireland covering a period of ten years. It is expected that operations under this scheme will be commenced in 1913.

In 1912 pipe varieties were planted on 143½ acres and cigarette varieties on 18½ acres.

So far as the Department are aware only two persons other than recognised experimenters grew tobacco in Ireland in 1912

under ordinary licence. The area so grown was approximately 4 acres. In addition 20 acres were grown under ordinary licence by one of the recognised experimenters solely for the production of nicotine.

The season of 1912 proved very unfavourable for tobacco growing. The excessive rainfall and low temperatures which prevailed during the growing and ripening stages of the crop very seriously affected the tobacco both in yield and quality, and neutralised the effects of the good weather which favoured the planting and harvesting operations. The growth of the crop was so retarded that most of the tobacco was three weeks late in maturing. The fine weather of September had the effect of causing such great improvement in the late plantings that several of the growers delayed harvesting their crops until October. Although in no previous year of the experiment had a damaging frost occurred before the middle of October, the delay in harvesting in 1912 proved disastrous, as on the night of the 3rd October practically all the tobacco growing on low lands was ruined by a severe frost. Most of the frosted tobacco was, however, harvested, and will be sold for nicotine purposes at a low price.

All the tobacco grown in 1911, with the exception of the crop at one centre, has been sold to manufacturers, the average price obtained being 5½d per lb. The prices ranged from 3d. to 8d. per lb. for pipe varieties, from 6d. to 7d. per lb. for cigarette varieties, and from 4½d. to 8d. per lb. for cigar tobacco of the Sumatra variety.

The reports of the three manufacturers who purchased the crop grown in 1910 were rather favourable. Considerable improvement in the quality of the tobacco was noted. It was reported as useful for blending in mixtures and roll, and also for wrapping plug and roll tobaccos.

As stated in the Report for 1910-11 the work of the Avondale poultry fattening station was transferred

POULTRY
FATTENING.

in August, 1911, to the Castle Poultry Farm, Rathdrum, which is under private management. The first year apprentice who had been at Avondale and who continued his course of instruction at this farm, completed his training in December, 1911, and was approved by the Department as qualified to act as poultry fatterer. As a result of an examination held in October, 1911, four candidates were selected for training at the farm; three of them commenced the course of instruction in December, 1911, and one in January, 1912; one left owing to illness in January, 1912, and the remaining three are still in training. The arrangement under which provision was made for the training of four apprentices at the Castle Poultry Farm has been renewed for the twelve months ending August, 1913. Four county instructors in poultry keeping

attended supplementary courses in the fattening and trussing of fowl, the grading of eggs, etc., at this farm in June, 1912.

At the commencement of the year 1911-12 two poultry fattening stations (in addition to the Rathdrum farm, were in receipt of subsidies of £1 5s. per week towards the wages of the fattener employed. The period of twelve months for which the subsidy had been sanctioned in these cases expired during the year 1911-12, but a reduced grant of 15s. per week for a further period of twelve months was approved. During the year 1911-12 a subsidy of £1 5s. per week for twelve months was granted in the case of another poultry fattening station, making a total of four poultry fattening establishments at present aided by the Department.

The system of packing apples in headed barrels of standard capacity, as recommended by the Department, is extending, and Irish apples, especially "Bramley's Seedling," are gradually acquiring a good reputation on British

MARKETING OF FRUIT.

markets. Grading and packing, as practised by some growers, leave little to be desired, and there is good reason to hope that when growers succeed in producing a larger proportion of apples free from "spot" by the more general and systematic adoption of spraying, Irish late cooking apples will be much in favour on British markets. It also seems highly probable that in many parts of the south, eating apples, especially early varieties such as "Beauty of Bath," and "Worcester Pearmain," may be grown with profit for market. The apple crop of 1912 has been much below normal both in quantity and quality.

It is believed that as stated in the report for last year, a general, though slow, improvement is taking place in the methods of marketing Irish eggs.

MARKETING OF EGGS.

The Department's instructor in the grading and packing of produce visited a large number of egg shippers during the year and afforded them advice and instruction in improved methods of marketing. Through the medium of the Department's marketing representative a considerable number of the better class of shippers who expressed a desire to obtain new outlets for their eggs were put into touch with buyers in Great Britain, who would, it was believed, do justice to the Irish product.

Several large shippers have adopted the Canadian system of packing eggs. The "Canadian" case holds 3 hhd. eggs which are placed in trays or divisions made of material somewhat akin to pasteboard or thick pulp paper, no straw or wood wool being required. This method of packing has given much satisfaction. The cases are of very handy size, and it is understood that the risk of breakage is about the same as when the eggs are well packed in long 12 hhd. cases, i.e., breakage does not exceed 2 per 120 eggs.

No material alteration was made this year in the Department's scheme for improvement in the management of creameries, printed in the Appendices page [91], which aims at promoting the Irish creamery butter industry by

- (1) Instruction in creamery management by means of visits of instructors in dairying to creameries,
- (2) The publication by the Department of lists of those creameries visited by the instructors which have attained a satisfactory standard,
- (3) Surprise butter inspections held by the Department to which the manager of each creamery included in the published list sends samples of the butter made at his creamery, with a view to ascertaining how it compares in quality with the butter from other creameries, and what defects, if any, require to be remedied.
- (4) Surprise butter inspections held by local associations for the benefit of creameries in the districts in which the associations are located.

The scheme is largely availed of by creamery managers and proprietors throughout the country, as shown by the following tables :—

(1) *Visits of Instructors in Dairying.*

(2) *Publication of Lists.*

Year ended 30th Sept., 1912	Number of Places visited by Instructors in Dairying	Number of Visits made by the In- structors*	List of Creameries and Auxiliary Creameries published in accordance with Clause 8 of the Scheme		
			Date of Issue	No. of Creameries on List	No. of Auxiliary Creameries on List
Creameries, Auxiliary Creameries,	180	1,126	17th Feb., 1912, .	103	114
	211	1,056	1st Aug., 1912, .	108	120
	391	2,182	.		

* The number of instructors engaged on this work is eight.

(3) *Surprise Butter Inspections held by the Department.*

Telegrams issued during the year ended 30th Sept., 1912	Exhibits judged	Number of exhibits
13th October, 1911, .	19th October, 1911, .	76
24th May, 1912, .	31st May, 1912, .	94
19th June, 1912, .	26th June, 1912, .	93
26th July, 1912, .	2nd August, 1912, .	95
14th August, 1912, .	21st August, 1912, .	100
12th September, 1912, .	19th September, 1912, .	98

(4) *Surprise Butter Inspections held by Local Associations.*

Name of Association conducting Inspection	Number of Creameries comprising Association	Number of Inspections held during year ended 30th Sept., 1912
North-West Dairy Association, . . .	15	3
Suir Valley Creameries Association, . .	13	6

(5) *Training of Creamery Managers.*—As already mentioned (see page 30), a course of instruction for existing creamery managers and young men intending to qualify for the position of creamery manager, was provided at the Department's agricultural station, Ballyhaise, county Cavan, commencing on 24th October, 1911, and terminating on 22nd March, 1912. In the case of students who have not already had adequate practical experience, the course in question requires to be supplemented by a training in the actual work of a creamery. The Department, accordingly, at the conclusion of the course, offered facilities for a training of this kind at selected creameries to a limited number of the best students who wished to perfect their knowledge of creamery management. Five students availed themselves of this arrangement during the year.

Short courses of instruction, occupying from two to three weeks each, for creamery managers were organised by branches of the Irish Creamery Managers' Association and by the Suir Valley Creameries Association during the winter of 1911-12 at local centres as follows:—

Name of Association by which Course was organised	Places at which Course was held	Number of Creamery Managers who attended
Donegal Branch, Irish Creamery Managers' Association, . . .	Strabane, . .	18
Cavan and Longford Branch, Irish Creamery Managers' Association, . .	Killeshandra, . .	28
Kerry Branch, Irish Creamery Managers' Association, . . .	Abbeydorney, . .	23
Suir Valley Creameries Association . . .	Thurles, . .	17

The Department's instructors in dairying acted as teachers, and the Department in each case made a small grant towards the expenses.

(6) *Examination for Creamery Certificates.*—The annual examination for certificates in subjects relating to creamery management was held as usual at the Department's agricultural station, Ballyhaise, county Cavan. The examination occupied three days, viz., 19th, 20th, and 21st March, 1912, and was attended by twenty-one candidates, including the students who were present at the creamery course at the agricultural station. One of the candidates had already satisfied the Department as

to his practical ability as a creamery manager and was awarded the full "Creamery Manager's Certificate" on the results of the examination. Certificates of having passed the examination in theoretical subjects were awarded to five other candidates.

(7) *Training of Dairymaids in Creamery Work.*—The Department offered facilities for obtaining a practical training as dairymaids at creameries to 17 pupils of the Munster Institute, Cork, and 9 pupils of the Ulster Dairy School, Cookstown, during the year. Of these 14 pupils from the Munster Institute and 4 pupils from the Ulster Dairy School availed themselves of the Department's offer. Ten completed their training during the year and were awarded certificates by the Department. The remainder are still undergoing instruction at creameries.

The Suir Valley Creameries Association, with the assistance of the Department (who provided the services of one of their instructors in dairying as teacher, and made a small grant towards the expenses), organised a short course of instruction for dairymaids and buttermakers already employed in creameries. The course was held at Killenaule, county Tipperary, and was attended by seventeen pupils.

(8) *Salt and Preservative Experiment.*—This investigation was brought to a conclusion this year. The results showed that the principal brands of Irish-made dairy salts are quite suitable for use in creameries, and confirmed the view that the use of preservatives other than salt is not required for commercial purposes in the case of butter made from clean milk in a clean creamery.

The experiments in winter dairying, particulars of which were given in last year's Annual Report, were proceeded with at (1) the Drumholm Co-operative Agricultural and Dairy Society's creamery, county Donegal, (2) the Lissarda Co-operative Dairy Society's creamery, county Cork, and (3) the Piltown Co-operative Agricultural and Dairy Society's creamery, county Kilkenny. The results of these experiments will not be available for some time, but an account of a similar experiment carried out at the Centenary Company's creamery in county Tipperary was published in the Department's JOURNAL (Vol. XII. No. 2) issued in January, 1912.

The Department's scheme No. 20, sec page [99] of the Appendices, provides for the improvement of the dairy cattle of Ireland by (1) the establishment of a register of dairy cattle, and (2) the formation of cow-testing associations.

During the year 1911-12 the number of cows offered for inspection with a view to provisional selection for registration was 618. Of this number, 555 cows were provisionally selected, 9 were not presented for inspection, and 49 were rejected as unsuitable.

The number of cows accepted for entry in the Department's register from the inauguration of the scheme in 1906 to the 30th September, 1912, is 885.

The figures in the foregoing paragraphs include the figures for cattle of the Kerry type. 90 Kerry cows were entered for inspection in 1911, and 74 of these were passed. The number of Kerry cows at present registered is 63.

During the year under review, 18 additional pure-bred shorthorn cows were entered under the scheme and were provisionally selected. The number entered in 1911 has, therefore, increased during the year to 186.

In connection with the inspection of the male progeny of registered dairy cows with a view to provisional selection for premiums under the Department's cattle breeding scheme, 74 bulls were offered for inspection and 44 of these were selected and were entered in the register as "Registered Dairy Bulls." The number of such bulls which have been accepted since the inception of the scheme as suitable for entry in the register is 94.

The Department appointed this year two instructors whose special duty it is to assist by advice and otherwise the establishment and successful working of cow-testing associations. As a result the number of these associations formed in connection with the Department's scheme for the improvement of dairy cattle increased from a total of 12 in 1911 to a total of 42 in 1912. The associations are distributed as follows :—

- 2 in Co. Cavar.
- 3 in Co. Cork.
- 3 in Co. Donegal.
- 2 in Co. Fermanagh.
- 3 in Co. Kerry.
- 2 in Co. Kilkenny.
- 6 in Co. Limerick.
- 1 in Co. Monaghan.
- 1 in Co. Sligo.
- 13 in Co. Tipperary, and
- 6 in Co. Tyrone.

The Department have agreed to make to the secretary of each of these associations a grant at the rate of 1d. per cow per monthly test towards the cost of testing the milk for butter-fat during the present year, and, under the Department's cattle breeding scheme, county committees of agriculture are authorised to permit premium bulls to be reserved for the exclusive use of any of these associations.

A leaflet (No. 15) explaining the objects and advantages of cow-testing associations and the method of keeping milk records has been added to the Department's series of leaflets.

Caerphilly Cheesemaking.—In continuance of the experiment referred to in last year's report the Department made arrangements with the Kneekavardagh Co-operative Creamery Co., Ltd., in county Tipperary, and the Shandon

Dairy Co., in county Waterford, whereby the companies undertook to carry on experimentally for one whole season the manufacture on commercial lines of the class of cheese known in Great Britain as "Caerphilly Cheese." Two of the four pupils trained last year were employed as makers by the companies, and in view of the experimental character of the project the Department agreed to refund one-half of the cheesemaker's salaries for one season on condition that the business was carried on in a satisfactory manner, and that the results of the experiment would be available for publication by the Department. The results as regards the quality of the cheese made are so far very favourable, and a number of other creamery proprietors have approached the Department with a view to obtaining advice and assistance in starting the industry.

By arrangement with an expert maker of this class of cheese in Somersetshire, the Department are training a number of additional pupils in order to provide for the demands which are likely to arise for skilled makers in connection with the establishment of the industry in this country.

A scheme of experiments in the feeding of live stock, full details of which are given in Division B. of the scheme of agricultural experiments (printed on page [108] of the Appendices) was introduced in 1912. The experiments were conducted in 24 counties and were supervised by the itinerant instructors in agriculture. The county committees of agriculture make small grants to farmers undertaking these experiments in order to compensate them for the trouble involved.

The number of live stock experiments of each class undertaken in 1912 was as follows :—

Number of Experiment in Schemes	Nature of Experiment.	Number undertaken.
I. (Pigs)	To ascertain whether pigs can be fattened profitably without potatoes,	12
II. (Pigs)	To test home-grown as compared with imported feeding stuffs,	11
III. (Calves)	To test oatmeal as compared with wheatmeal in meal mixtures,	16
IV. (Cattle on grass)	To test home-grown as compared with imported feeding stuffs,	6
V. (Cattle in stalls)	To test home grown as compared with imported feeding stuffs,	9
Total,		54

The results of the experiments are being collated and will be published in due course.

During the year 1911-12, operations in connection with the dead meat trade were successfully carried out at Drogheda and Wexford, where dead meat societies had been formed with a view to establishing the industry on a permanent basis. In 1910 the Department had made provision for grants as follows, towards defraying preliminary expenses and providing expert advice in the initial stages of the industry, at the above-mentioned centres, the grants to be administered by the county Louth and county Wexford committees of agriculture respectively :—

1. Remuneration of a qualified instructor for one year.
2. Remuneration of a qualified butcher for one year.
3. Miscellaneous incidental expenses, such as travelling expenses of instructor, etc.

As mentioned in the Department's annual Report for the year 1910-11, the dead meat society formed at Drogheda commenced operations in January, 1911, and continued until May of that year when work was suspended owing to the want of a suitable abattoir, and also to the warm weather. Work was resumed in October, 1911, and continued until the end of March, 1912, when operations were again suspended owing to the scarcity of fat cattle. The trade was again resumed in the beginning of August, 1912. The London salesmen disposing of the meat have commented favourably on its quality and the manner in which it is dressed, and there are good prospects that a successful industry will be established.

The Department have promised to afford assistance in the erection of an abattoir at Drogheda, which it is expected will be completed early in 1913.

The Wexford dead meat society did not begin to avail themselves of the Department's grant until February, 1912. The society had submitted proposals for testing methods of feeding cattle which, with some modifications, were approved by the county committee of agriculture and the Department. The society did not however find it practicable to carry out this scheme, and the original plan for the utilisation of the grant on the lines above indicated was accordingly reverted to. A new abattoir has been erected at Wexford and is now in full working order. The trade is assuming considerable proportions at this centre.

The North of Ireland Cattle Feeders' Association, who in 1911 carried out trials in the marketing in London of cattle slaughtered at Belfast, were offered assistance by the Department for the carrying out of further trials. The Association did not, however, find themselves in a position to take advantage of this offer.

Two representatives of the London Central Meat Markets attended for interview at the Department's offices on the 16th August and discussed the question of developing the dead meat trade between Ireland and London. One of the Department's inspectors afterwards accompanied these gentlemen on a tour of the districts most likely to prove sources of supply of meat of the quality required.

A conference of representatives from the Wexford and Drogheda dead meat societies and the North and South Kildare Farmers' Associations was held in the Department's offices on the 28th August, at which suggestions for the development of the industry were considered.

Preliminary steps were also taken at Cork and Waterford by persons interested in the establishment of the trade at these centres. The Department signified their willingness to assist in the initial stages of the work.

The usual arrangements for the analysis of spraying materials were continued during the past year, with the result that over 500 samples were received and tested by the Department. With the exception of five samples, all were found to be up to the standard of purity required for spraying purposes. In the five cases in question, sulphate of soda had been supplied to purchasers instead of carbonate of soda (washing soda). The Department are satisfied that in all these instances, wrong material was supplied solely through error on the part of the shopkeeper concerned. There is little in the appearance of carbonate of soda to enable a farmer to distinguish it readily from other soda compounds, such as sulphate or nitrate of soda. For this reason it is advisable that in all cases washing soda intended for spraying purposes should be submitted to the Department for examination previous to being offered for sale.

The special report of proceedings under this Act for the year 1911-12 is at present in course of preparation. When published, copies may be purchased from Messrs E. Ponsonby, Limited, 116 Grafton Street, Dublin.

During the winter of 1911 and the following early spring two officers of the Department were detailed for the purpose of giving short courses of instruction to traders engaged in the sale of artificial manures and feeding stuffs. Such classes were held in Ennis, Athlone, New Ross, and Letterkenny. The classes in each case were well attended, and the traders concerned expressed themselves as well satisfied with the instruction afforded. It may be mentioned that the courses in question, which occupy only a few hours each day for about a week, are intended to afford shopkeepers such technical knowledge as may be useful to them in the conduct of their business. The Department are prepared to arrange for a similar course of classes in any town in which the traders desire to obtain such instruction.

In addition to their staff of official samplers employed throughout the country, the whole time of two officers of the Department was devoted during the spring to the work of visiting, for the purpose of taking samples, the shops and stores of merchants engaged in the sale of manures and feeding stuffs. The total number of samples received amounted to 867, of which 814 were duly submitted for analysis. On the whole the condition of the manure trade may be regarded as satisfactory. In regard to feeding stuffs, there is, however, room for improvement, a considerable quantity of expensive calf meals and compound feeding cakes still finding a ready sale in the country.

Reference was made in previous reports to the operations of certain cross-channel firms in pushing the sale, in this country, of low-grade manures. Particulars of an interesting case in which a number of small farmers resident in a remote district in the West were processed by one of these firms to recover the cost of manures supplied, will be found in the above-mentioned special report. The farmers concerned had quickly discovered the worthless nature of the article they had been induced to purchase and declined payment. On the hearing of the cases, in which expert evidence was given by the Department's officers, judgment was given in favour of the defendants, and costs amounting to £15 awarded. Appeals were subsequently entered, but withdrawn. Considerable quantities of their manures were also disposed of by this firm in one of the midland counties. Though here also the majority of the purchasers declined payment, no effort has been made by the company to recover same. At the same time this firm also disposed of quantities of inferior meals for calf and pig rearing purposes. To demonstrate in a practical manner the worthless nature of these meals, an interesting feeding experiment was conducted at one of the Department's agricultural stations, the results of which fully bore out the Department's estimation of these meals as judged merely from the results of analysis and examination.

Full particulars of this experiment are given in the special report above alluded to.

Despite repeated warnings of the Department, instances continue to come under their notice of failure on the part of local traders to furnish purchasers with the invoices required by this Act. In two cases during the year in which such warnings had been neglected the Department were compelled to institute proceedings, and in both instances convictions were obtained.

American Gooseberry Mildew and Black Currant Mite (Ireland)

<p>DESTRUCTIVE INSECTS AND PESTS ACTS, 1877 and 1907.</p>	<p>Order, 1908.—During the year under review 325 cases of American Gooseberry Mildew and 77 cases of Black Currant Mite were reported. The usual notices requiring the destruction of affected bushes and the adoption of other preventive measures were served on the occupiers concerned.</p>
---	---

Further experiments were conducted by the Department this year at three centres with a view to discovering an effective remedy for American Gooseberry Mildew. The Department regret to state, however, that the results obtained were not satisfactory. For the present, therefore, it would seem that the only reliable method of preventing the spread of this disease consists in the immediate destruction of affected bushes.

Owing to the restriction imposed by Article 6 of the above Order, prohibiting the importation of gooseberry and currant bushes into this country, and to other causes, the stocks of gooseberry bushes in Irish nurseries were being considerably depleted. The Department, therefore, convened a conference of nurserymen early in the year, with a view to discussing the measures to be taken to obviate the anticipated scarcity of bushes which must follow. As a result of this conference, the Department propose at an early date to revise this Order with a view to permitting any person having a nursery in Ireland, who desires to do so, to import a small quantity of bushes for stock purposes only from certain approved cross-channel nurseries in which American Gooseberry Mildew has not been known to exist.

Black Scab in Potatoes (Ireland) Order, 1908.—An officer was again specially employed during the digging season last year in making a thorough inspection of the small district of county Down in which a few cases of Black Scab had been reported in previous years. As a result, two cases—in the district in question—were reported. These two outbreaks were of very slight extent, only a few affected tubers being discovered. The usual notices were served on the growers, requiring the destruction by burning of the diseased tubers and of the haulms. The Department's officer supervised the measures taken to comply with the requirements of these notices. Under his direction the sound tubers were safely disposed of. The growers were, of course, prohibited from planting potatoes again on the same ground without the previous sanction of the Department.

The regulations affecting the importation of potatoes coming from Ireland into Malta were modified last year in so far that exporters were not required to furnish the usual certificates from the Department.

Weeds.—In February last the Department again approached the councils of those counties in which Part I. of this Act was not in force, with the result that the councils of four additional counties, namely, Carlow, Galway, Mayo, and Tyrone, signified their consent to this part of the Act being put in operation in their administrative areas. In the case of one county, King's, a resolution consenting to the enforcement of Part I. of the Act was subsequently rescinded. This part of the Act is therefore now in force in 22 counties, and 2 county boroughs.

WEEDS AND
AGRICULTURAL
SEEDS (IRELAND)
ACT, 1909.

The following table shows the plants specified as noxious weeds in each case:—

Schedule of Counties in which Noxious Weeds Orders have been made under the Act, and of the plants which have been scheduled as noxious weeds in each case.

<i>County</i>	<i>Plants declared to be Noxious.</i>
Antrim, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Armagh, . . .	Ragwort, thistle, dock.
Carlow, . . .	Do.
Down, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Dublin, . . .	Ragwort, coltsfoot, thistle, dock.
Fermanagh, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Galway, . . .	Thistle, dock, ragwort.
Kerry, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Kildare, . . .	Ragwort, coltsfoot, thistle, dock.
Kilkenny, . . .	Thistle.
Limerick, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Londonderry, . . .	Thistle, dock.
Louth, . . .	Ragwort, coltsfoot, thistle, dock.
Mayo, . . .	Thistle, dock.
Meath, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Monaghan, . . .	Do.
Queen's, . . .	Ragwort, coltsfoot, thistle, dock.
Roscommon, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Tipperary (N.R.), . . .	Charlock, ragwort, thistle.
Tipperary (S.R.), . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Tyrone, . . .	Thistle, dock.
Westmeath, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
<i>County Boroughs.</i>	
Belfast, . . .	Ragwort, charlock, coltsfoot, thistle, dock.
Dublin, . . .	Do.

The work of inspection was commenced on the 18th June, and completed about the middle of September, 31 temporary inspecting officers being constantly employed for this purpose. Reports from them were received in 8,300 cases, and in 8,109 cases (being an increase of over 2,000 as compared with last year) notices requiring the destruction of noxious weeds were served. As may be seen from the table below, these notices were, in the great majority of cases, readily complied with. A few cases were reported in which no action could be taken owing to the impossibility of ascertaining the necessary particulars of ownership. In 20 cases the Department were compelled to institute legal proceedings, in each of which a conviction was obtained and a fine imposed.

The appended table shows the number of cases dealt with in each county :—

County	Number of Notices				No. of Prosecutions
	Served	Complied with	Partly Complied with	Not Complied with	
Antrim, . . .	298	290	6	2	2
Armagh, . . .	147	133	4	10	—
Carlow, . . .	192	191	—	1	—
Down, . . .	448	436	5	7	—
Dublin, . . .	295	288	5	2	—
Fermanagh, . .	131	129	—	2	—
Galway, . . .	238	229	3	6	—
Kerry, . . .	405	376	22	7	3
Kildare, . . .	295	277	12	6	2
Kilkenny . . .	188	174	6	8	1
Limerick, . . .	555	539	10	6	1
Londonderry, .	564	560	1	3	—
Louth, . . .	263	249	11	3	2
Mayo, . . .	554	519	31	4	—
Meath, . . .	536	494	42	—	—
Monaghan, . .	231	215	11	5	—
Queen's . . .	342	317	24	1	—
Rosecommon, .	244	241	3	—	—
Tipperary, N.R.,	326	324	1	1	1
Tipperary, S.R.,	739	712	24	3	7
Tyrone, . . .	801	793	6	2	—
Westmeath, . .	317	315	1	1	1
Total, . . .	8,109	7,801	228	80	20
Percentages	—	96	3	1	—

Seeds.—A full report of proceedings under Part II. of this Act will be found incorporated with the special Report under the Fertilisers and Feeding Stuffs Act, which is at present in course of preparation. Copies, when published, may be purchased from Messrs. E. Ponsonby, Ltd., Government Sale Agents, 116 Grafton Street, Dublin.

Under Part II. of the Act, over 2,000 samples of seed were taken from the stocks in the stores of wholesale and retail seed merchants in this country. Of these, 788 were duly tested in the Department's Seed Testing Station. The reports on these samples are at present under consideration.

While the results of the test of those samples taken during the year 1911 revealed the fact that there was still considerable room for improvement in the quality of the seed offered for sale in certain districts, the Department were not of opinion that

they should exercise their power under this Act to publish the results of their tests of unsatisfactory samples. A conference of the principal wholesale and retail seed merchants was called early in the year, and the matter received full discussion. An account of the proceedings will be found in the special Report mentioned above.

While there was a slight decrease in the number of samples submitted for testing by farmers during the past season, there has been a very noticeable increase in the number of samples received from seed merchants. The actual number of samples tested was 2,108, being an increase of 19 over the corresponding number for 1910-11. Of these 708 were submitted by farmers, 358 from seed merchants in Ireland, 30 from merchants outside of Ireland, and 224 from officers of the Department. The remaining 788 samples were selected for testing from those samples taken in pursuance of the provisions of Part II. of the Weeds and Agricultural Seeds (Ireland) Act, 1909.

The following table shows the number of samples received from each county which were tested :—

County.	No. of Samples.	County.	No. of Samples.
Antrim	127	Limerick	3
Armagh	26	Londonderry	98
Carlow	41	Longford	0
Cavan	38	Louth	40
Clare	0	Mayo	4
Cork	232	Meath	24
Donegal	29	Monaghan	12
Down	55	Queen's County	11
Dublin	281	Roscommon	5
Fermanagh	0	Sligo	0
Galway	2	Tipperary	4
Kerry	18	Tyrone	74
Kildare	33	Waterford	16
Kilkenny	11	Westmeath	1
King's County	37	Wexford	57
Leitrim	0	Wicklow	11

The accompanying table is a summary of the results of the tests for purity and germination of the various kinds of seeds

(excluding those examined under the Act) made during the year:—

Name of Seed.	No. of Samples Tested.	Purity.			Germination.		
		Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
Wheat,	24	100	99.8	99.7	100	47	93
Oats,	110	100	98.8	100	100	58	91
Barley,	83	100	89.5	99.4	100	59	97
Rye,	1	96.8	96.8	96.8	91	91	91
Perennial Rye,	150	99.9	73.5	97	98	65	89
Italian Rye,	133	100	90	98.4	98	44	85
Hareseed,	4	85	74.9	79.4	89	70	80
Mixed Grass Seed,	1	96.8	96.8	96.8	90	90	90
Meadow Fescue,	31	99.9	84.3	95.7	98	42	83
Meadow Foxtail,	21	97.9	76.1	93.5	69	29	43
Timothy,	47	99.7	84.7	96.8	99	43	90
Cocksfoot,	55	99.9	89.6	94.4	96	24	73
Crested Dogtail,	16	99.9	81.9	97.2	99	84	92
Tall Fescue,	2	99.7	94.8	97.2	77	53	65
Red Clover,	98	100	89.3	97.2	99	42+1h	91+5h
White Clover,	33	99.4	78.1	94.6	98+1h	36+6h	77+10h
Alfalfa Clover,	50	99.5	88.1	98	98+1h	20+1h	83+8h
Trifolium,	14	100	97.1	98.6	98+1h	89+1h	94+1h
Sweet,	62	100	98.7	100	99	67	89
Turnip,	22	100	100	100	99	62	90
Rape,	4	100	100	100	100	94	97
Cabbage,	12	100	100	100	91	34	83
Manure,	50	100	100	100	194	75	127
Beet,	3	100	100	100	151	119	138
Carrot,	5	96.7	96.6	93	86	40	64
Onion,	1	99.8	99.8	99.8	89	89	89
Parsnip,	3	98.5	97.8	98.1	77	52	67
Flax,	259	99.9	93.6	98.7	100	55	91
Vetches,	4	100	100	100	99	83	94
Peas,	3	100	100	100	96	67	86
Tomatoes,	12	—	—	—	90	6	67

Wheat.—The majority of samples tested were very satisfactory, the average germination being 18 per cent. higher than in the previous year.

Oats.—More than two-thirds of the samples tested germinated 90 per cent. and over, but there were some inferior samples such as those germinating only 75 per cent., 65 per cent., and 58 per cent. respectively.

Barley.—Most of the samples tested were very good, the average germination being 14 per cent. higher than in the previous year.

Perennial Rye.—The purity in the majority of cases was very satisfactory, and the germination showed an improvement on the previous year. Ninety-eight out of one hundred and fifty samples tested germinated 90 per cent. and over. Only seven samples were decidedly inferior, germinating between 75 and 65 per cent.

Italian Rye.—The purity was very satisfactory, and the germination showed an improvement on the previous year. Forty-nine out of one hundred and thirty-three samples tested germinated 90 per cent. and over, but there was a considerable proportion of inferior samples, in some of which the germination was as low as 62, 58, 54 and 44 per cent. respectively.

Meadow Fescue.—The purity and germination were slightly lower than in the previous year. Eleven out of thirty-one samples tested germinated 90 per cent. and over. There were three inferior samples, germinating 66, 57, and 42 per cent. respectively.

Meadow Foxtail.—Really good seed of this was practically unobtainable during the past season. Consequently, the germination was exceptionally poor; only one sample reached 60 per cent., while in some cases germinations as low as 32, 29, 24 and 20 per cent. were found.

Timothy.—The purity was, on the whole, satisfactory, and the average germination 12 per cent. higher than in the previous year. There were three inferior samples, germinating 62, 47, and 43 per cent. respectively.

Cocksfoot.—The purity was satisfactory, and the average germination was 3 per cent. higher than in the previous year. Eleven of the samples germinated 85 per cent. and over, but many of the remainder, however, were far from satisfactory, the germination being, in some cases, as low as 39, 29, and 24 per cent.

Crested Dogstail.—The purity on the whole was very satisfactory, and the average germination was 24 per cent. higher than in the previous year.

Red Clover.—The majority of samples tested was of satisfactory germination, with the exception of two samples which germinated only 72 and 42 per cent. respectively. The purity was on the whole satisfactory; 15 per cent. of the samples contained seeds of Dodder, as compared with 6 per cent. in the previous year.

White Clover.—Much of the white clover tested was of low germination; only eleven of the samples germinated 90 per cent. and over. The purity of nearly all the samples was, however, satisfactory.

Alsike.—The average purity was the same as, and the average germination was 4 per cent. lower than, in the previous year. Thirty per cent. of the samples were, however, of first class quality.

Trefoil.—The purity and germination were on the whole very good, the average purity being 3 per cent. and the average germination 35 per cent. higher than in the previous year.

Mangel.—Out of 50 samples tested, eleven germinated over 150 per cent., and thirty-seven over 100 per cent. The average germination was 10 per cent. higher than in the previous year.

Swede, Turnip, Rape.—As is usual with these seeds, the purity.

and germination were satisfactory. Two only of the samples tested were inferior.

Flax.—The purity was satisfactory. Seventy-one per cent. of the samples germinated over 90 per cent.; while only four of them were decidedly inferior, germinating 63, 57, 57 and 53 per cent. respectively.

Cabbage.—The average germination was 21 per cent. higher than in the previous year. There was only one really bad sample—germinating 34 per cent.

Carrot.—The five samples tested were satisfactory with regard to purity. The average germination was 20 per cent. higher than in the previous year.

Parsnip.—The samples of this seed were pure, but the germination was 77, 72, and 52 per cent. in the three cases.

Vetches.—The purity and germination of the majority of the samples tested were satisfactory.

The special investigations on potato diseases started at the temporary station for investigation of
 INVESTIGATION OF plant diseases at Clifden, county Galway,
 POTATO DISEASES. in 1909, were further extended during the
 period under review. The detailed account
 of the investigations will be published in one of the forthcoming
 numbers of the Department's JOURNAL. Work was concentrated
 this year chiefly on the "Blight," the so-called "Stalk Disease,"
 "Spongospora" scab, "Leaf Roll" and a new form of tuber
 rot which causes considerable loss, and for which the name
 "Pink Rot" has been suggested. Important results were obtained
 which throw much needed light on the life-history of the
 fungus which causes the "Blight," and further data were
 acquired as regards the value of spraying for this disease.
 Interesting results were also secured in connection with the discovery
 of means for avoiding the Stalk Disease and Spongospora
 scale, while the causes of one form of Leaf Roll and of Pink
 Rot respectively have been determined, and information gained
 which will be of assistance in dealing with these diseases.

The station was also used for some minor experiments in
 connecton with the "bolting" of swedes, the growth of
 Westerwoldian rye grass, and the strawberry-headed clover.

Five of the six apprentices in forestry who took out the first
 year's course at the Department's woods,
 FORESTRY. Dundrum, co. Tipperary, were transferred
 to Avondale forestry station to follow the
 second year's course during the session 1911-12. The four
 second-year apprentices at Avondale remained at the station
 for a third year's training. An examination for new apprentices
 was held in September, 1911, in accordance with the prospectus

printed at page [48] of the Appendices. Six candidates were selected for training and followed the first year's course at Dundrum. The total number of forestry apprentices in training during the year was fifteen.

Seventeen acres were planted and fifteen acres were cleared in readiness for planting work at Avondale station. Additions were made to the forest plots and to the arboretum. About 105,000 young trees were supplied from the station nurseries to the Department's other forestry centres. The museum collection received several new specimens during the year.

The following table gives particulars of the lands acquired by the Department under the Land Purchase Acts for forestry by means of the Parliamentary Vote of £6,000 ;—

Centre.	Area.		
	A.	R.	P.
Dundrum, co. Tipperary,	1,196	2	23
Camolin, co. Wexford,	646	1	25
Aghrane, co. Galway,	1,277	0	36
Bailieborough, co. Cavan,	404	3	7 6
Ballykelly, co. Londonderry,	253	2	15
Knockmany, co. Tyrone,	467	0	9
Baunreagh, Queen's county,	1,926	3	22
Woodford, co. Galway,	433	0	31
Kilrush, co. Clare,	*406	0	11
Total,	7,011	3	18

The Department hope soon to be placed in possession of an additional area of about 300 acres situated in co. Fermanagh; which has been purchased under this vote from the Estates Commissioners.

During the season of 1911-12 about 28 acres were planted at Camolin, 24 acres at Dundrum, 15 acres at Ballykelly, and 12 acres at Bailieborough.

At the other centres the work consisted principally in laying out nurseries, completing fences, and clearing and draining land preparatory to planting. A quantity of felled timber at Camolin and Woodford was sold by tender, and successful auction sales of poles and brushwood were held at Bailieborough and Knockmany. At other centres small quantities of light timber and firewood were disposed of locally by private sale. About 1,350 tons of sawn timber were sold from the saw mill at Dundrum. It has not yet been found possible to proceed with the proposed establishment of saw-mills at Camolin and Aghrane, as contemplated in last year's Report.

As mentioned in the last Annual Report, the Treasury have approved of advances not exceeding £25,000 in all, being made, as required, from the Development Fund for the purchase of areas suitable for afforestation. The Department have not yet secured possession of any of the lands proposed to be purchased

*The Department have received possession to date of only 386a. 1r. 23p. at this centre.

by means of these advances. Considerable difficulty was experienced in obtaining offers, at reasonable prices, of areas of suitable land in blocks of a size sufficient to admit of economic forestry and at the same time free of rights which would interfere with planting. Negotiations are, however, practically completed in the following cases, and it is expected that possession of the lands will be obtained at an early date.

	Approximate Acreage.
Ballyhoura Hills, co. Cork,	2,900
Glendalough, co. Wicklow,	2,000

Negotiations for the purchase of other afforestable lands are proceeding.

The Department continued to allow the services of their forestry expert to private persons and public bodies requiring advice in connection with forestry matters. Trained working foresters, so far as their work in the Department's woods allowed, were available for engagement by persons making plantations or conducting other extensive forestry operations. Advice in forestry matters was also supplied by letter and through the leaflets on forestry subjects in a very large number of cases.

Applications were received during the year from eighty-six holders under the Land Purchase Acts for the consent of the Department, pursuant to section 32 of the Irish Land Act, 1909, to the felling of trees on their holdings. Twelve cases, which had not been fully investigated at the close of the previous year, were also dealt with. The Department acceded in full to forty-one of these applications, and in part to nineteen. One application was refused. In thirteen cases the provisions of the Act did not apply. In two cases applicants who had felled without having received the Departments' consent were warned of the penalties to which they were liable. Decisions in the remaining twenty-two cases had not been come to at the close of the year 1911-12.

During the year the Department made an arrangement with the Inspector-General, Royal Irish Constabulary, under which the police report to the Department all cases in which the felling of trees is observed on holdings purchased under the Land Acts. It is hoped that this supervision will effectively check indiscriminate felling of trees required for protection or ornament.

The county councils of Kildare and Westmeath have in operation schemes under which small woodlands in their counties, which would otherwise be likely to be destroyed, are purchased and preserved by the councils. The areas in the hands of the councils are respectively 239 acres and 25 acres.

Fifty-five acres have been planted by Kildare county council.

The committees of agriculture for counties Donegal, Kildare, and Mayo have in operation special schemes under which they supply

trees to suitable applicants for planting shelter belts on agricultural holdings. In county Donegal a trained forester is specially engaged by the committee in connection with this work. The number of trees distributed and the number of holders supplied during the season 1911-12 in each of the three counties are as follows :—Donegal, 1,300 holders, 183,533 trees; Kildare, 9 holders, 20,150 trees; Mayo, 16 holders, 14,000 trees.

1. *Credit Societies*.—During the year ended 30th September, 1912, loans amounting to £150 were made to two agricultural credit societies which had obtained similar advances in previous years. From 1900 to 30th September, 1912, a total of £18,292 had been issued to

170 societies, and of this sum £7,299 was outstanding on the latter date.

2. *Agricultural Implements, etc.*—The various schemes under which loans were granted for the purchase of hand separators, horse spraying machines, and thistle cutters were combined during the course of the year under review into one scheme, and extended so as to include practically every kind of agricultural implement, etc.

The following table gives a summary of the operations under this scheme :—

Kind of Machine	No. of Loans	Amount advanced in Loans
Hand Separators,	32	£255 17 9
Horse Spraying Machines,	4	23 1 0
Thistle Cutting „	3	27 0 0
Reapers and Binders,	9	168 5 0
Mowers,	9	64 4 6
Threshing Machines,	5	443 7 6
Potato Diggers,	2	16 2 6
Totals,	64	£997 18 3

The Mayo county committee of agriculture purchased 25 knapsack spraying machines for hire to small farmers and others in the county at a small daily charge. The cost of the machines was defrayed out of the joint fund at the disposal of the committee.

3. *Fencing*.—During the year 155 applications were received as compared with 101 in the year ended 30th September, 1911. The increase was due to the extension of the scheme to county Kerry, and to the development of the scheme in the districts in which it has been for some years in operation. A special feature of the year's work was the erection on Clare Island, co. Mayo, of fencing on practically the full extent of the cliffs bordering the island, a sum of £319 being issued in loans for this purpose.

The following table gives a summary of the number of applications received, loans granted, etc., up to the 30th September, 1912 :—

Year ended 30th Sept.	No. of applications	No. of applications withdrawn	No. of applications under consideration on 30-9-12	No. of Loans granted	Amount of Loans granted
1907—1910, .	267	26	1	219	£3,946
1911, .	101	4	1	80	£1,277
1912, .	155	10	57	125	£2,304
Totals,	523	40	59	424	£7,527

4. *Meal Mills, etc.*—One loan of £24 was conditionally granted under this scheme.

5. *Village Halls.*—One loan of £200 was granted, and at the close of the period correspondence regarding two other applications was proceeding.

6. *Fruit Trees.*—This scheme was issued in December, 1911, and one loan of £60 was issued that season. At the close of the year under review the Department were in correspondence with prospective fruit growers who contemplated forming associations for the purpose of the scheme in their districts.

2.—TECHNICAL INSTRUCTION.

This section of the Report covers the academic year from the 1st August, 1911, to the 31st July, 1912. The various educational schemes organised and controlled by this Branch of the Department continue to make satisfactory progress. Some observations of general interest may be dealt with here, but a more detailed criticism of the various schemes is to be found in the reports of the Inspectors which follow.

The Schemes of Technical Instruction administered by Local Authorities continue in increasing measure to meet the industrial needs of the country. The main lines of the schemes were laid down at their initiation but they are continually added to and amended as the work progresses. Perhaps the most marked feature in connection with the schemes is the increasing efficiency of the Technical Schools, and this is largely due to the extensive adoption of the "Course" system. The revised Regulations for the administration of the Science and Art Grant were so framed as to confine grants to schools providing suitably devised courses of in-

struction to meet the needs of industrial students, and these courses have now been generally introduced. It was found desirable at a later period to introduce a scheme by which grants at a lower rate might be paid in the case of smaller centres and rural districts in respect of single subjects of instruction, and this scheme is found to exert a very beneficial influence in such districts where it would be impossible to organise courses of instruction, but where excellent and highly necessary work could be done. Reference was made in the Report for the year 1910-11 to the proposal to establish an Examination System suited to the changed conditions in the schools brought about by the operation of the revised Regulations. The Department have now issued a Programme of Technical School Examinations designed to follow courses of instruction extending over four years in a limited number of branches of technical knowledge. For the present they propose to provide examinations for courses in :—

Commerce,	Electrical Engineering,
Building Trades,	Mechanical Engineering,
Applied Chemistry,	Domestic Economy, and Art.

The Department propose to issue certificates to students passing the prescribed examinations in these courses. To those passing the Third Year Examinations, and who have already passed in the previous examinations, a Provisional Certificate will be issued and a Full Course Certificate will be awarded on the passing of the Fourth Year Examinations. It is further proposed to issue Full Course Honours Certificates to candidates who pass in the further examinations specified in certain Courses. It is confidently hoped that the establishment of this Scheme of Examinations will greatly encourage students to take the Courses of Instruction organised by Technical School Authorities. The examinations are quite optional on Schools and Students, but it is believed that the issue of these certificates, based as they are on Courses of Study, will be found to be of great value to students and to employers.

Reference has been made in previous Reports to the want of suitable buildings of a permanent character. Owing to the energetic and progressive action of a number of Municipalities the difficulty is not now so acute as it was formerly, and new buildings have already been provided at the following centres :—

Dublin.	Bangor.	Ballsbridge.	} Iron Buildings.
Belfast.	Blackrock.	Wicklow.	
Cork (Technical Institute).	Coleraine.	Carrickfergus.	(These premises although erected for the purposes of a Technical School were not built by the Technical Committee, but by the Literary and Scientific Society, who retain a portion of the building for their own use.)
Londonderry.	Dundalk.		
Limerick.	Kingstown.		
Waterford.	Larne.		
Ballymoney.	New Ross.		
Banbridge.	Strabane.		

New Buildings are projected or actually in course of erection at :—

Arklow.	Magherafelt.	Navan.
Galway.	Rathmines.	Tralee.

In the case of the following centres existing buildings have been adapted to meet as far as possible the needs of a Technical School and it may be said that, on the whole, the accommodation is well adapted to immediate needs :—

Athy.	Enniskillen.	Lurgan.	It will probably be necessary to provide other accommodation in the near future at these centres.
Cork (School of Commerce).	Limavady.	Portadown.	
Armagh (practically new building)	Naas.		
Ballymena.	Newry.		
Birr.	Newtownards (practically new building, only outer walls of existing building utilised).		
Bray.	Queenstown.		
Clonmel.	Sligo.		
Enniscorthy (practically new building).	Tullamore.		

In the following centres buildings have been adapted to enable much needed instruction to be given. It can hardly be said that the accommodation is satisfactory, but the best has been made of the existing conditions, and thus enables good work to be done. In the absence of funds for building purposes, little more can be done.

Antrim.	Downpatrick.	Macroon.
Athlone.	Drogheda.	Maryborough.
Ballinasloe.	Dromore.	Mullingar.
Ballyragget.	Dungannon.	Omagh.
Bendon.	Kildare.	Roscrea.
Bantry.	Kilkenny.	Tullamore.
Birr.	Killarney.	Templemore.
Castleblaney.	Kinsale.	Wexford.
Cookstown	Listowel.	

It is in still smaller centres that difficulty is mostly experienced, and attention is called in the reports of the Inspectors to the difficulty of suitably housing the courses of instruction conducted in sparsely populated centres by Itinerant Teachers working under the Department's schemes

The Department's Scheme of Technical and Apprenticeship Scholarships is now in operation and promises to be very valuable. Particulars of the Scholarships held are given at the end of this section of the Report,

The following table shows the number of students (with their occupations) attending instruction in the four Provinces:—

TABLE SHOWING THE OCCUPATIONS OF STUDENTS ATTENDING URBAN AND COUNTY SCHOOLS AND CLASSES IN NON-AGRICULTURAL SUBJECTS.

Occupations of Students	Leinster	Munster	Ulster	Con-naught	Totals
YOUNG MEN.					
Persons engaged in Farming Occupations.	716	459	978	491	2,644
Building Trades—including Workers in Wood, &c.	377	429	404	80	1,290
Coach and Car Builders,	33	44	14	4	95
Engineers, Workers in Metal, Draughtsmen, &c.	324	242	927	6	1,499
Architects, Surveyors, Civil Engineers, &c.	51	36	65	—	152
Electrical Engineers, Scientific Instrument Makers, &c.	107	50	86	1	244
Printing Trades—Compositors, Lithographers, &c.	87	45	155	9	296
Textile Industries—Designers, Weavers, &c.	29	35	576	3	643
Painters Decorators, &c.	67	57	96	16	236
Plumbers, Gasfitters, &c.	73	53	76	7	209
Trades involving applied Art—Jewellers, Furniture Makers, &c.	47	48	117	16	228
Chemists, Analysts, Drug-gists, &c.	70	50	139	1	260
Salesmen, Shopkeepers, Warehousemen, &c.	372	282	713	164	1,531
Clerks in Commercial Offices, .	629	404	1,072	68	2,173
Clerks in Banks, Civil Service, Law, Assurance and Accountants' Offices.	313	144	378	1	836
Teachers, Assistant Teachers, Pupil Teachers.	174	177	306	65	722
Students (University, Law, and Medical).	71	24	66	27	188
Occupations not included in the above class	759	334	411	98	1,602
Boys just left School or College.	94	169	182	25	470
Boys still in attendance at School or College.	612	970	534	222	2,338
No Occupation stated, .	370	138	310	232	1,050
TOTAL NUMBER OF YOUNG MEN.	5,375	4,190	7,605	1,536	18,706
Corresponding Numbers for 1910-11.	4,917	4,175	6,923	1,327	17,342

OCCUPATIONS OF STUDENTS—continued.

Occupations of Students	Leinster	Munster	Ulster	Con-naught	Totals
YOUNG WOMEN.					
Persons engaged in Farming Occupations.	1,033	1,740	1,154	602	4,529
Domestic Servants, . . .	672	367	689	97	1,825
Printing Trades,	6	8	47	—	61
Dressmakers, Milliners, &c.	218	122	404	45	789
Textile Industries—Designers, Weavers, &c.	53	22	544	—	619
Factory Workers not included in above.	136	31	730	5	902
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn Thread Work, &c.	93	544	857	258	1,752
Saleswomen, Shopkeepers, &c.	349	536	487	53	1,425
Clerks, Cashiers, Civil Servants, &c.	394	152	707	40	1,293
Teachers, Assistant Teachers, Pupil Teachers.	463	387	964	132	1,946
Students (University, Medical)	30	18	86	6	140
Occupations not included in above Classes.	603	497	640	247	1,987
Girls just left School or College.	191	400	285	24	900
Girls still in attendance at School or College.	888	877	811	272	2,848
No Occupation stated, . . .	1,315	1,063	2,454	948	5,780
TOTAL NUMBER OF YOUNG WOMEN.	6,444	6,764	10,859	2,729	26,796
Corresponding Numbers for 1910-11.	5,850	6,833	10,434	2,850	25,967
TOTAL NUMBER OF STUDENTS.	11,819	10,954	18,464	4,265	45,502
Corresponding Numbers for 1910-11.	10,767	11,008	17,357	4,177	43,309

The Department's Programme in Experimental Science, Drawing, etc., for Day Secondary Schools continues to make satisfactory progress. The organisation of this scheme was one of the first duties undertaken by the Department,

SECONDARY
SCHOOLS.

and, working in co-ordination with the Board of Intermediate Education, they have been enabled to introduce the Programme into almost every Secondary School in Ireland. The Syllabuses of Instruction have, from time to time, been revised as necessity for revision has appeared, and this work appears to be exerting a very beneficial effect on Secondary Education. It is conducted in well-equipped laboratories, and sufficient experience has now been gained of the working of the Programme to satisfy the Department that it is well suited to the needs of the country.

There is one point in connection with Secondary Schools which affords cause for concern, viz., the decline in the number of schools which include Manual Instruction in their curriculum. The subject is of great value educationally, it is popular with schools, some of which maintain workshops for recreative purposes alone, and teachers have been trained to teach the subject and are already in the schools. The subject is of considerable importance to the vast majority of Secondary scholars in Ireland who leave school at, or before, attaining the age of sixteen and who will, therefore, follow an industrial rather than a professional career. The Department give aid in respect of such teaching but the subject is severely handicapped, as compared with others, in that it is not recognised as a "subject" under the rules of the Intermediate Education Board. Under these circumstances, too great a financial disadvantage is involved for schools to take the subject.

Attention may be drawn to the addition of a new Special Course—Physical and Commercial Geography—to the Programme. This addition was made contingent upon changes made in their courses by the Intermediate Education Board, and will, it is hoped, stimulate the teaching of applied Geography on approved lines.

The following table shows the growth and present position of this Programme in the Secondary Schools:—

Province and Year.	No. of Schools.	No. of Pupils who worked through the Courses, and upon account of whom grants were payable.					Amount of Grants Earned.
		Preliminary Course, 1st Year.	Preliminary Course, 2nd Year.	Special Courses, 3rd Year.	Special Courses, 4th Year.	Totals. (Individual Pupils).	
LEINSTER.							
1901-2, .	66	2,732	—	—	—	2,732	3,932 3 11
1904-5, .	103	2,128	1,363	468	119	4,078	7,530 19 0
1907-8, .	111	2,406	1,721	799	246	5,136	9,951 2 9
1910-11, .	108	2,541	1,661	1,077	235	5,411	10,575 16 7
1911-12, .	107	2,550	1,750	900	300	5,500	10,800 0 0
MUNSTER.							
1901-2, .	39	2,098	—	—	—	2,098	2,943 9 4
1904-5, .	70	1,507	867	384	52	2,810	5,350 7 1
1907-8, .	82	1,905	1,285	619	128	3,924	7,286 14 11
1910-11, .	82	1,794	1,194	711	149	3,821	7,186 0 8
1911-12, .	80	1,750	1,150	650	150	3,700	6,800 0 0
ULSTER.							
1901-2, .	42	1,596	—	—	—	1,596	2,431 7 0
1904-5, .	68	1,184	735	315	81	2,315	5,316 8 8
1907-8, .	77	1,520	1,103	491	119	3,211	7,676 19 0
1910-11, .	79	1,476	1,191	569	140	3,362	8,406 18 4
1911-12, .	74	1,550	1,100	600	150	3,400	8,500 0 0
CONNACHT.							
1901-2, .	7	189	—	—	—	189	268 10 5
1904-5, .	15	272	201	100	15	588	1,219 8 11
1907-8, .	19	382	276	150	38	844	1,810 8 6
1910-11, .	16	360	243	142	30	773	1,786 8 5
1911-12, .	16	350	250	150	30	780	1,800 0 0
TOTALS.							
1901-2, .	154	6,615	—	—	—	6,615	9,575 10 8
1904-5, .	256	5,091	3,166	1,267	267	9,791	19,417 3 8
1907-8, .	289	6,213	4,385	2,059	531	13,115	26,725 5 2
1909-10, .	285	6,171	4,389	2,499	554	13,367	27,955 4 0
1911-12, .	277	6,200	4,250	2,300	630	13,380	27,900 0 0

The figures for the Session 1911-12 are approximations only.

MR. VICKERS DIXON, *Senior Inspector*, reports :—

SECONDARY SCHOOLS.

The work in Experimental Science and Drawing was continued upon the same lines as heretofore, and on the whole a very good standard was obtained in these subjects.

Physical and Commercial Geography was added to the list of subjects upon which grants are payable in Secondary Schools, and it was also recognised as a subject of the Intermediate Education Board's Examinations, but the number of schools that took this subject was very small. Want of definiteness in treatment of the Syllabus, due probably to the newness of the subject and insufficient attention to field and practical work, were very noticeable, and consequently the standard reached in this subject was only fairly satisfactory.

Experimental Science generally was well taught. The aims of the Syllabuses were kept well in view, and conscientious efforts made to cultivate in the pupils the spirit of inquiry, and the powers of accurate observation and legitimate reasoning. In the weaker schools, owing to the heavy demands upon the teachers' time, there was much evidence of lack of preparation of lessons, the excessive use of text-books, and the dictation of notes; while in these schools also the laboratories and apparatus have not been well kept—consequently much of the training in method, observation, self-reliance and manipulative skill which the courses were designed to confer was lost to the pupils.

Here it may be pointed out, as has been already noted in previous reports, that very few schools provide a work bench or even a few tools which would enable simple apparatus to be made or repaired. The provision of such facilities would be of great value to the schools. Not only would it tend to keep down certain expenses of the classes, but it would also maintain the interest in their work of the teachers and pupils many of whom are ingenious, and could design and make new forms of apparatus if they had the facilities for the necessary mechanical operations.

With a view to assisting the younger teachers, the Syllabuses in Chemistry were re-written and notes and suggestion on the teaching of the subject added. These, it is hoped, will not only prove helpful to the teachers but tend to a more systematic and logical treatment of the subject.

Good progress still continues to be made in the teaching of Drawing, and it is more marked in this subject than in Experimental Science. This is largely due to the adoption of better methods and to greater care in the drawing up of well graded schemes of work. The weakest sections of this subject are Geometrical Drawing of the Second Year's Course and Geometry of the Special Course. In these, general principles do not receive adequate attention and there is a tendency to burden the pupils' memory with a multiplicity of text-book problems, which have not been sufficiently analysed to enable the pupils to recognise the fundamental principles these exercises should teach.

While in the last few years some improvement has been effected in the accommodation for the teaching of Drawing, much yet requires to be done in providing good examples of Drawing Ornament, etc., and, generally, in making the rooms more attractive in appearance.

The reduction in the number of schools taking Manual Instruction noted in last year's report still continues. This is unfortunate as there are many pupils attending the Secondary School, especially in the smaller towns and rural districts to whom such a course would be of greater benefit than that which can be derived from the other subjects of the school curriculum. Apart from the valuable training this subject affords, it is one which appeals at once to the interests of the boys. This fact is recognised by a few schools in which workshops and tools are provided to enable the boys to amuse themselves by making various objects and models. Unfortunately these workshops are not in charge of responsible persons, and the equipment is ill kept.

If these tools and workshops were properly kept, and utilised in addition for instruction, their value to the schools would be much increased.

DAY TRADES PREPARATORY SCHOOLS.

The good work done in the past in the Trades Preparatory Schools is now being generally recognised, and the schools are showing a normal rate of increase. In addition to the 12 schools already established one was opened this session in Cork under the Christian Brothers, 52 boys were enrolled and its success secured. A new building is at present being provided to accommodate this school.

It is pleasing to note that the value of the training given in these schools is now highly appreciated by employers. No difficulty is experienced in placing boys who have gone through a Three Years' Course—in fact the difficulty is to retain them so long—so great is the demand of employers for practically trained boys. Several firms give a preference to boys who have passed through these schools when selecting employees, and some have gone so far as to start such boys at a higher rate of wages than that paid to boys who have had a less practical training.

TECHNICAL INSTRUCTION UNDER LOCAL AUTHORITIES.

The work under Urban and County Committees showed a decided increase in both the numbers of classes held and of the pupils enrolled.

The new Scheme enabling Committees to earn grants upon single subjects was widely taken up by County Committees, who were now for the first time in a position to obtain grants in respect of itinerant classes. That the scheme was not so largely taken up in the urban centres is no doubt partly due to the Committees having already made their arrangements for the session before the scheme was announced. The Scheme should relieve the Committees of the smaller schools of much financial anxiety, as the only means hitherto open to them for increasing their funds was by obtaining grants under the Course System. This necessitated their providing complete courses of instruction in two or more subjects extending over at least three years. This they could only do with difficulty, and seldom efficiently, as they were compelled to give concurrent instruction in two or more syllabuses of a subject. Here it may be pointed out that it would be better for these smaller schools to devote their chief energies to one or two courses specially designed to meet the requirements of the locality, and to place their less important classes under the new Scheme than to attempt to run a large number of courses on their small finances, and which can only attract a small number of pupils.

Much of the work still continues to be of an elementary character. This must be so till the schools can secure the attendance of their pupils over a period of 3 or 4 years. While some improvement in this direction was noticeable during the last few years much yet remains to be done, and till the average school life of the bulk of the pupils is at least three years, the effect of the schools will not be apparent to the general observer, and they will be open to the criticism of being very expensive.

Of all the subjects taught under the various schemes Domestic Economy attracts the greatest number of pupils. In urban centres it is responsible for nearly one-third and in rural centres for nearly one-fourth the total number of pupils. Commercial subjects come next in urban centres, attracting upwards of one-fourth the total number, while in rural centres the Industrial Classes draw about as many pupils as Domestic Economy.

The large numbers attending the Commercial Classes is accounted for by the fact that, while the classes in the other subjects—which may be regarded as more particularly specialised—are chiefly attended by those who have already adopted an industrial career, the commercial classes are attended by a large number of young pupils who have not as yet found permanent employment. The bulk of these pupils attend such classes for one year only. The wisdom of spending the limited funds for Technical Instruction on these pupils is doubtful. The instruction that they can

receive is of a very elementary character, and if not continued for three sessions can be of very little value to them and the country. Further, they cannot with advantage be taught in the classes formed for those already in offices or at business, as the instruction for this type of pupil, to be of value to them, must be essentially different.

There has been a small increase in the number of day classes for apprentices, and it is pleasing to note that there is an increase in the number of employers who grant their apprentices "time off" if they attend the evening classes at the Technical Schools; but as yet very few grant similar facilities to their apprentices to attend day classes, consequently such classes are found in very few schools in the country.

A large number of special classes in Drawing, Domestic Economy, and a few in languages and in Experimental Science were held at the Technical Schools for Primary and Secondary School Teachers. The Commissioners of National Education allowed the teachers travelling expenses and certain facilities to attend these classes, which on the whole were very successful. There was, however, this session a diminution in the number of classes and students in Experimental Science. This is due to the fact that already a large number of the older National School teachers have qualified in this subject by attendance at these classes, and that the younger teachers have received instruction in this subject as part of their training. Some schools are contemplating the formation of classes in Rural Science and School Gardening as a continuation of this subject, and for which there is an apparent demand.

To obtain well qualified teachers is a serious difficulty, especially with the smaller schools which do not require, and cannot afford to pay, whole-time officers. In certain directions, *e.g.*, Domestic Economy, Commerce, Manual Instruction, Drawing and Experimental Science, the Department has to some extent, by the Irish Training School of Domestic Economy, Special Scholarships and Courses for Teachers, met the demand. It is pleasing to note that the Technical Institutes of Belfast and Dublin have sent out highly qualified teachers in different technological subjects, and the Commercial Schools of Rathmines and Cork similar teachers of Commerce.

During the session the new school buildings in Cork, Limerick, and New Ross were completed, and extensive workshops and laboratories for Motor Engineering were added to the Pembroke School, and it is expected that the new schools in Armagh and Rathmines will be completed during the current session. Arklow, Magherafelt, and Tralee are preparing to build new schools; Ballymena and Ballymoney additions to the existing schools, and Baltinglass, Downpatrick and Limavady are altering existing buildings, while Galway and other smaller towns are contemplating building.

During the session the Department issued their scheme of examinations in Technical Schools to replace those of the Board of Education, now withdrawn. This scheme provides for examinations in Electrical and Mechanical Engineering, Building Trades, Commerce, Art and Domestic Economy. It is hoped that this scheme will be useful not only in indicating the subjects such courses should comprise but also the standard that should be aimed at.

MR. TURNBULL, *Inspector for the Southern District*, reports:—

COUNTY SCHEMES.

All Committees availed themselves of the new Regulations of the Department's Programme (see Section II. b.) which provided for payment of grants on the attendances of students who presented themselves for instruction in single subjects. They were thus enabled to obtain grants, not only on their itinerant classes, but also on a large number of other pupils who did not come under the Course System. The result should prove a considerable addition to the incomes of County Committees, who should thus be in a position to widen the scope of their schemes of Technical

Instruction. The various courses and classes included under the County Schemes followed the lines of those of the previous year, and as they were discussed in the last Annual Report it is unnecessary to refer to them further.

In Manual Instruction the courses generally were efficiently conducted; in a few cases however, Drawing did not receive adequate attention, and the educational value of the training was not recognised. A noteworthy development of this work is the addition of instruction in Metal work. This instruction has as yet only been given in a few centres, but it has proved very popular.

The instructors conduct classes for three distinct types of student :—

(1.) Trade apprentices, journeymen and labourers, in evening classes where the work is of a varied nature according to the requirements of the students, and ranges from the making of simple joints to the more intricate work of the carpenter, joiner and cabinet-maker. The drawings also vary from the simple plan and elevation of a prismatic block of wood to the advanced work required by students of Building Construction.

(2.) Primary schoolboys who are taught the drawing and making of simple joints and models in afternoon classes after day-school hours.

(3.) Secondary School-boys whose work is similar to that of the primary school-boys. They are taught in their own schools during day-school hours.

In this way many boys and young men undergo a sound training in drawing and woodwork, and students who have been under instruction for three or more years carry out work that requires a considerable degree of knowledge and skill. The average period of attendance however, does not exceed two or three years.

The attendance at Domestic Economy Courses shows no signs of diminution. The demand has in fact increased, and it frequently happens that a greater number than can be accommodated present themselves for enrolment at Itinerant Courses. In some cases a waiting list has to be formed and a second course is arranged to follow the first, and that often in districts where the population is scattered. Lack of suitable accommodation has been a serious hindrance to this work; sheds and buildings of various kinds that were barely fit for human habitation, were often the only available accommodation, and the fact that much good work has been carried out under these adverse conditions speaks eloquently for the energy and missionary spirit of the Instructresses.

Commercial Instruction was continued as formerly in Co. Cork, and at most of the centres visited there was a good demand for instruction, but the great diversity in the pupils has prevented the attainment of a high standard of teaching.

Instruction in Art was given in the Counties of Cork, Kerry, and Waterford, but it has been found difficult, except in one group of classes in Co. Cork, to capture the interests of the craftsmen. The group referred to consists of classes at Fermoy, Midleton, and Youghal, where owing to the energy of the teacher very successful classes were held. This has been more especially evident at Fermoy where the demand for instruction was too great for the accommodation provided, and additional rooms, as well as assistance in teaching, had to be supplied. In addition to the crafts provided for, as mentioned in last year's Report, further developments were the formation of a class for Lacemaking and of another for repoussé work in copper. The experience of Fermoy goes to prove that there is no serious difficulty in securing the attendance of suitable students.

Industries for young women were carried out at various centres, of which the following are of interest :—

(1.) Limerick Lace-making at Cashel, Cahirciveen and Thurles Presentation Convents; here the work was limited in amount and depended on occasional orders.

(2.) Clones Crochet at Convents in Bantry, Cahirciveen, Cashel, Roscrea, Thurles and Youghal.

(3.) Needlepoint at Youghal Presentation Convent, which has established a wide reputation for this expensive form of lace. In addition to the above-named centres there were the usual itinerant courses for instruction in Crochet at rural centres in Co. Cork, and there are several Convents, some of which formerly claimed assistance from County Committees, and which are now conducting Lace and Crochet classes as independent industries.

The three Residential Schools of Domestic Training and the Higher School of Domestic Economy, Waterford, were well supported, and the students received a sound training in household subjects. The number of students who finished their training were 20 at Dundrum, 17 at Dunmanway, 14 at Waterford, and 8 at Carrick-on-Suir. At Dunmanway and Waterford the students were all fee-paying, at Dundrum 8, and at Carrick-on-Suir all (8) of the students held County Scholarships.

The new system of Scholarships for boys was introduced during the session, and five Counties adopted the scheme. The following are the numbers of Scholarships awarded by Committees and tenable in Day Trades Preparatory Schools:—One from Co. Tipperary (N.R.), ten from Co. Tipperary (S.R.), and one from Co. Waterford. The numbers of Apprentice Scholarships awarded and taken up were:—Two from Co. Limerick, three from Tipperary (Joint Urban and Rural), and one from Co. Waterford. Four of these have been apprenticed as engineers with Irish Railway Companies, one with a Shipbuilding Company, and one with a builder. Their progress at the works and also at the Technical Schools, where they are required to follow recognised courses of instruction, is being closely followed.

CITY AND URBAN SCHEMES.

The session was marked by the opening of the new Technical Institutes at Cork and Limerick. The former provides excellent accommodation for all Science and Technological classes, but the latter, owing to lack of funds, is unable to include the classes in Building Trades' subjects and in Applied Art, which have been continued in rooms at the Athenaeum. No change has occurred in the conditions of the other Schools as reported last year, but Tralee is within measurable distance of the building of a new school, and Tipperary Committee have under consideration the question of providing a Central School for the town. At all Institutes and Schools, excepting Limerick, there has been an increase in the number of students in attendance as well as a widening of the courses of instruction.

The Commercial Schools and Classes continued to attract many first year students, and a fair number proceeded to the second and subsequent years of study, but it is disappointing to find that many students cease attending after the First Year Course. This is a serious blemish of the work, and is one that must be removed if these schools are to meet the real needs of business people.

SECONDARY SCHOOLS.

Of the 74 schools which followed the Department's Programme, 65 were also Intermediate schools, and 4 of the remaining 9 were Day Trades' Preparatory Schools, of which three, viz., those at Clonmel, Queenstown, and Waterford, have been in operation for some time, while the fourth was opened last year by the Christian Brothers at Our Lady's Mount, Cork. These schools serve a very useful function, and the training given to the boys is recognised by employers of labour to be a very sound preparation for trades which require accuracy of measurement and calculation as well as manual dexterity. The following table shows the auxiliary and special courses of instruction in the secondary schools:—

Course.	Auxiliary.		Special.		Total.
	First Year.	Second Year.	Third Year.	Fourth Year.	
Manual Instruction,	22	22	2	—	46
Domestic Economy,	12	9	17	11	49
Drawing,	—	—	16	7	23
Botany,	—	—	3	2	5
Physiology & Hygiene,	—	—	4	5	9
Mechanics,	—	—	4	—	4
Physical & Commercial Geography,	—	—	4	—	4
Physics,	—	—	6	5	11
Chemistry,	—	—	27	11	38
	34	31	83	41	189

Instruction was similar to that of the previous session. There was a still further decrease this year in the number of courses in Manual Instruction for boys. It was satisfactory, however, to find an increase in the number of Girls' Schools taking special courses in Domestic Economy. The only new feature was the introduction of the Special Course in Physical Geography by four schools. Observations on physical and elementary geological features were made during excursions into the surrounding country, and simple surveys were undertaken to show the pupils how to measure the areas of fields. In the laboratory also, maps, including sections and contour lines, were drawn to illustrate physical features. Each school was provided with meteorological instruments, and observations were systematically made and recorded. In some cases the relative importance of the main parts of the Course were lost sight of, but with further experience the teachers should make their instruction both attractive and useful, and thereby lay a sound foundation for a higher training in Commercial and Economic Geography.

PRIMARY SCHOOLS.

The teaching of Drawing and Manual Instruction—the only subjects in these schools under the supervision of the Department—was continued as in previous years, and there was no new feature that requires special comment.

DR. GARRETT, *Inspector for the Northern District*, reports :—

COUNTY SCHEMES.

The nine Counties of Ulster again conducted Schemes of Technical Instruction. No two of these schemes are exactly alike, but certain factors are common to all.

The Schemes in Antrim, Fermanagh, Londonderry, Monaghan and Tyrone provided for Technical Schools in the smaller towns, which could not by themselves afford to carry on efficient schools. These schools are under the supervision of local Committees which from time to time advise the general Committee as to the needs of the district and the conduct of the classes. Fourteen schools have been established under these conditions, and the structural organisation for Technical Instruction within the five counties is thus, in a sense, complete. The extension of the system to the

remaining Counties is a matter of time and funds. The accommodation available for the schools is still unsatisfactory, except in Enniskillen, Linnavady and Strabane; there are, however, evidences of a growing desire for better and more suitable buildings. The work of these schools is dealt with in connection with that of the independent Urban Schemes. It may, however, here be mentioned that the co-operation of town and county effected in the joint schemes is of a decided advantage to both, since it enables the schools to employ more highly qualified teachers and gives the surrounding districts the benefit of a wider range of subjects and more specialised instruction than could be obtained were the towns and counties working independently.

A large part of the work in all the counties takes the form of Itinerant Instruction in rural centres. This work has increased considerably in the past session, 132 courses having been held as compared with 105 in the previous year. The increase was rendered possible by the appointment of additional teachers in Armagh, Donegal, Down and Tyrone, and the needs of the province have, on the whole, been well met. Due care has, however, not been taken to see that the instruction is properly distributed over the administrative areas, and the selection of centres is seldom considered in relation to the location of classes in previous years. Hence some districts have not yet received an adequate share of instruction. It is much to be desired that maps showing where classes have previously been held should be available when the centres are chosen. In Monaghan and Tyrone but little instruction in Domestic Economy has been given, and in Fermanagh and Londonderry the number of courses of all sorts was somewhat small. The new attendance grants on Itinerant Courses should provide funds which will enable the work to be extended.

In Domestic Economy there were 74 courses, in Woodwork 57 and in Commercial subjects one. The classes were with few exceptions, suitably housed, well attended and efficiently taught. In a small number of the Cookery Classes, however, sufficient attention has not been paid to economy, and the cost of conducting the courses has in consequence been high.

In the Adult Woodwork classes two faults have been apparent. In the first place mechanical drawing has been much neglected, with the result that the students have not acquired the necessary power of reading and working from a drawing. Unless the students acquire this power the instructor's time must necessarily be spent in giving detailed directions, and the students do not learn to work independently. In the second place, too much liberty has been given to the students in the selection of the articles to be constructed so that they have, in many cases, attempted articles which proved too difficult for them and which could not be completed within the course. Measures are being taken to bring about an improvement in both directions.

Industries classes have been carried on in six counties, Armagh having introduced instruction of this character. The distribution of the classes will be seen from the following table:—

COUNTY.	IRISH CROCHET LACE. Number of Centres.	SPRIGGING. Number of Centres.	Total.
Armagh	1	—	1
Cavan,	10	—	10
Donegal,	4	6	10
Fermanagh,	9	5	14
Londonderry,	—	2	2
Monaghan,	7	—	7
	31	13	44

The progress of these classes continues to give much cause for satisfaction. This will be readily appreciated when it is stated that fifteen of them are now well established industries earning an average of more than £320 per annum. The total sum earned during the year exceeded £5,800, exclusive of private earnings not paid through the classes. During the past three years the average amount earned has exceeded £6,000 although two convent classes, earning about £1,200 per annum, have recently ceased to work under the County Schemes, having become sufficiently strong to run as self-supporting industries.

The receipts in Sprigging Classes were adversely affected by a depression in the trade which lasted for several months in the winter. Further, three of the best industries classes were left without teachers for a considerable part of the session, leading to depreciation in the standard of work and to serious financial loss to the districts concerned.

The policy which has now been generally adopted in northern counties aims at placing a teacher in a district and maintaining the class there permanently, provided prospects of success are shown within a reasonable time. It also aims at gradually reducing the cost of conducting the classes and eventually of receiving a contribution towards the salary of the teacher, thereby enabling the County funds to be set free for this work in other districts. This is effected by a scheme, now in general operation, under which one penny in the shilling is deducted from the sale prices to cover running expenses. In classes where the turnover is sufficiently large this deduction more than covers expenses, and the surplus accumulates as a fund for the prompt payment of cash on completion of work. Classes which have been some time in existence now possess a comfortable balance from this source which they employ as working capital. In Fermanagh, where home industries have reached their greatest development, annual contributions are even being made from the fund mentioned towards the salaries of the teachers, so that some of the industries are being conducted at an almost nominal cost to the Committee. At the close of the session the united working capital of all the classes amounted to £381. The success of the scheme is established, and its benefit to the workers is recognised throughout the province.

The keeping of accounts is now better understood by the teachers, and the industries are being conducted on more businesslike lines. There is still however room for improvement in this direction. The County Secretaries, in all the counties except Cavan, have paid periodical visits to the classes to supervise the accounts, and their visits have been productive of much good.

It is satisfactory to note that excellence of workmanship is being demanded by most of the teachers, and if the work put on the market is kept up to a high standard there can be little doubt as to the continuance of the success of the classes. There is some improvement in the design of the lace work, but the designs carried out are still very often of a crude description and there is some tendency towards stereotyping the patterns. If the industry is to compete successfully against machine made lace, good and varied designs are essential. Efforts have been made to secure greater cleanliness of working, but much still remains to be done in this respect.

The principal direction in which an immediate improvement is looked for is in the housing of the classes. Efforts are being directed towards securing comfortable and suitably equipped class-rooms. Success cannot reasonably be expected if students are obliged to work in physical discomfort. The funds mentioned above will to some extent be employed to raise the standard of comfort.

County Down was the only county to adopt a Boys' Scholarship scheme. The Scholarships were held in the Belfast Trades Preparatory Schools.

TECHNICAL SCHOOLS.

In the past session 32 Technical Schools have been conducted in Ulster. Two of these are situated in the County Boroughs of Belfast and London-

derry, 16 are managed by Urban District Committees, and 14 by Joint Committees of County and Urban Authorities.

The number of students in attendance was again considerably over 12,000, and showed some increase on the previous year. The most notable increases were at Belfast and Larne, and the only decreases of importance took place at Newry and at the three Schools conducted under the Antrim County Scheme.

The type of student enrolled is gradually improving. In the early days many adults of middle age joined the classes, and there were also a good many primary school children. The tendency now is to secure students shortly after they have left school and the other types mentioned are disappearing from the classes. Some of the schools, such as those at Ballymoney, Newry and Newtownards, refuse to enrol National School pupils, while others such as that at Coleraine discourage their attendance and only admit them to the Preparatory Course. Much of the success of the work depends on securing students who have not forgotten how to learn and who are in a position to appreciate the bearing of the instruction on industrial methods.

The policy pursued in the schools aims at securing greater efficiency and greater consolidation of the work. The original conception of a Technical School as an institution intended to provide a wide range of useful classes open to all, while probably necessary in the initial stages, led to great waste of endeavour. It has now been considerably modified, and efforts have in recent years been concentrated on grouping together the heterogeneous classes, then established, into organised courses of instruction suited to the needs of the districts served. These courses extend over four or five years and are designed to lead gradually from the simple to the complex. At the same time they are intended to secure to the student as broad an education as can be given under the circumstances and thereby fit him for his life work.

It is evident that the efficiency of the schools depends on the extent to which they succeed, first in getting their students into organised courses, and second in retaining them for the full period necessary for the completion of their courses. With regard to the first point, it is gratifying to be able to report that in 22 schools more than 50 per cent. of the students followed approved courses, and in 13 of these the percentage reached was over 70. Taken generally, it may be said that half of those enrolled last session were course students. This proportion may seem somewhat low, but it must be remembered that a very large number of those who attend the Domestic Courses are of the artisan type and do not reach the prescribed standard of education. It is undesirable, in their case, to impose any restrictions which would have the effect of debarring them from instruction which they are quite capable of appreciating. With regard to the second point, the measure of success which has been achieved is most clearly explained by stating that the average time which the students devote to their courses is not quite two years. There are naturally marked differences between schools in this respect, some of those in which the students are best carried forward being Armagh, Ballymoney, Coleraine, Carrickfergus, Larne and Magherafelt, and some of the worst in this respect, Dromore, Holywood and Newry.

The statement made above implies that a considerable number of students do not proceed beyond the first year of their course, to a large extent the work done on these is of little value. That this is true will be realised if some particular subject of a course is considered. Take for instance the Short-hand taught in the first year of a Commercial Course. In one year a student seldom, or never, gets beyond a knowledge of the script, and does not make sufficient progress to be able to take down a letter from dictation in reporting style. It is only in the second year that he begins to be able to use what he has learnt with effect. If therefore he does not proceed further, the year's work is unproductive. What is true of this subject is more or less true of all others. The early years must be spent in fundamental

training, which only becomes effective as an instrument when more highly developed.

The chief defect of our schools at present lies in this shortness of school life. The causes of it are very diverse. In some cases they are of a nature which cannot be prevented, e.g., the removal of students to other parts of the country or the empire, or the assumption of duties which preclude attendance at a Technical School; but there are undoubtedly many other cases of waste which could be prevented. In this connection it is worth noting that in schools where definite courses are laid down, and it is made clear to students that they cannot complete these courses in less than four years, the result has been that the students continue in attendance longer than elsewhere. In Belfast and Londonderry it is further very noticeable that the students of Commerce, in which little has been done to formulate definite courses of instruction, have fallen away very much more rapidly than in other more highly organised Courses, such as those in Engineering and Building Trades, in the same institutions. All the evidence at our disposal points to the fact that the formulation of clearly defined courses, drafted with a view to well balanced progress in the various branches of knowledge necessary for a thorough understanding of a trade, business or industry, leads directly to a greatly increased efficiency of training. The attendance becomes more regular and the school life longer sustained. It is therefore expected that the new Course Examination system which has just been established by the Department will give a valuable lead to the Schools in the selection of suitable courses and be of assistance to them in securing the attention of their students to sound and systematic courses rather than to ill related subjects.

Simultaneously with the endeavour to make the work carried on in the schools more efficient by the means explained, there has been a noticeable movement to extend it in such directions as will make it fit more closely to the needs of local industries. Thus the schools established at centres of linen manufacture are, one after another, extending their instruction into Textiles. Smaller schools situated in rural areas are giving increased attention to suitable courses for farmers. The Monaghan schools have been giving considerable attention to courses suitable to shop-keepers' assistants.

The continued growth of the classes in Domestic Science is remarkable and gratifying. Schools which formerly held only two or three classes each week now employ whole-time teachers, and even then find difficulty in meeting the demands made upon them. This is particularly true in manufacturing centres such as Banbridge, Ballymena, Newtownards and Portadown, where considerable numbers of factory operatives now receive instruction in this subject.

All the schools, except three, conducted Preparatory Courses. It cannot however be said that they fulfil the purpose of feeding the Specialised Courses, except in a few cases, such as those at Ballymoney, Carrickfergus, and Londonderry. On the whole only some 46 per cent. of last year's Preparatory Course students advanced to Specialised Courses.

The increased funds, due to the attendance grants, now at the disposal of the Schools, have enabled a number of well-qualified whole-time teachers to be appointed, wherever sufficient day work could be found for them. In Ballymena, Belfast, Londonderry and Portadown their services are effectively used in conducting Day Trades Preparatory Schools. Day Apprentice Classes for Engineers have also been held in Belfast, Portadown and Newry, and for Compositors at Belfast. It is encouraging to note that some employers are realising the value of this work, and give it practical recognition.

The services of the Domestic Teachers have been used for conducting Day Cookery Classes for National School Girls in 17 centres—an increase of 11 on last session. Some 800 children collected from 60 schools received instruction and qualified for grants. The scheme of co-operation under which these classes are conducted is of benefit to the National Schools,

because it provides teaching by highly qualified instructresses in well-equipped kitchens, and it is useful to the Technical Schools not only because it enables valuable day work to be provided for their whole-time teachers, but also because it should lead to a much higher standard in this subject in later years when these young people become pupils of the Technical Schools.

In the past session the new School building at Larne was opened, and the excellence of the accommodation provided produced a marked effect on the number enrolled as well as on the efficiency of the work. The building at Armagh has been completed, and will be ready for occupation in the coming session, while that at Limavady has been considerably extended and improved.

SECONDARY SCHOOLS.

In the early days of Technical Instruction in Ireland, the inspection of Secondary Schools was by far the most onerous section of the work of an inspector. The reason was that an entirely new system of practical instruction was being introduced which was unfamiliar to schools and teachers alike. To instal a new system in existing schools was one thing, to call into existence a whole set of Technical Schools and to build up a system of Technical Instruction suited to the needs of the country was a much more difficult and onerous task. The former was a matter of a few years work, the latter is still far from completion, but already the Technical School work in Ulster is of far greater magnitude than that in the Secondary Schools. Experience has shown that the source to which we must look for students of Evening Schools is the Primary School. An almost negligible proportion of the students are drawn from Secondary Schools, and indeed in several of the centres where there are now flourishing Technical Schools there are no Secondary Schools. One section of Technical Instruction is, however, almost entirely dependent on the Secondary School, viz., the higher institutions such as the Day Technical School at Belfast and the various central institutions for the training of teachers of Science and Technology. Day Schools of Art are also largely recruited from Secondary Schools.

Under these circumstances it becomes necessary to recognise what is the function of Science teaching in Secondary Schools and to secure its fulfilment. With the majority of the pupils it must serve chiefly as a factor in their general education, and it may be taken that the training in the Preliminary Course, at least, has for its main object the inculcation of orderliness—orderliness of habit, of observation and of mind. Correct reasoning is the outcome of correct observations and an orderly arrangement of the observations in relation to one another. The special course work goes further than this, and may be regarded as a preparation for higher or University training; it should be instructive as well as educative.

We have now reached the stage where science teaching has taken its proper and legitimate place in the curriculum of the schools, and where the objects of the training, as stated above, are understood. Its value is universally admitted, but with the admission something of the earlier enthusiasm of individual teachers has been lost. Generally speaking, however, it may be said that there are considerably fewer cases of inefficient teaching and also a greater number of cases of excellence. The work in short approaches more nearly to a high standard. One specially gratifying feature may be noticed. Little by little, new teachers who have themselves passed through a Secondary School course of science teaching and have proceeded to further training of University type are taking their places in the schools. These teachers show enthusiasm as well as a thorough appreciation of the objects of the instruction, and their influence will help to raise the standard still higher.

During the year 74 schools in Ulster followed the Department's Programme. The number of courses of various kinds will best be seen from the following table :—

Course.	Number of Schools taking the subject.
Introductory Physics	79
Introductory Chemistry	77
Drawing, 1st Year	79
" 2nd Year	77
Chemistry, 3rd Year	30
" 4th Year	9
Physics, 3rd Year	22
" 4th Year	10
Botany, 3rd Year	11
" 4th Year	8
Physiology, 3rd Year	6
" 4th Year	5
Mechanics, 3rd Year	5
Physical Geography, 3rd Year	4
Domestic Economy, 1st Year	8
" " 2nd Year	6
" " 3rd Year	9
" " 4th Year	7
Drawing, 3rd Year	29
" 4th Year	8
Manual Instruction, 1st Year	10
" " 2nd Year	8
" " 3rd Year	3
Total,	510

The only marked changes from last year are the introduction of Physical Geography in four schools, and an increase in the number of schools taking Chemistry.

The work done in Physical Geography showed that the teachers were only vaguely conscious of the methods required to obtain good results from the instruction. There was in consequence a want of definiteness in the course followed which was reflected in the knowledge displayed by the pupils, but at the same time both teachers and pupils found the work distinctly interesting.

PRIMARY SCHOOLS.

The twelve primary schools which followed the Department's Programme in Drawing last year again gave instruction of this character.

In six of the schools the standard reached was excellent, the remainder ranking as good.

The work generally shows improvement, and notwithstanding many inherent difficulties the instruction has been of a highly useful and educative type.

In the lower classes the pupils now show a satisfactory knowledge of simple geometrical terms and concepts. In the higher classes there is still room for improvement in the use of set squares and in the training of the pupils to observe proportions correctly.

Four of the Schools gave instruction in Manual Work in addition to Drawing. Three of these secured the award "excellent." The pupils

have acquired accuracy of workmanship and considerable skill in the making and reading of working drawings. The training given in Manual Instruction is undoubtedly of great value to the average primary schoolboy, and it is unfortunate that it is not more widely disseminated.

Mr. McCaffery, *Inspector for the South Central District*, reports :—

COUNTY SCHEMES.

Under the heading of County Schemes the work in ex-urban areas only will be dealt with, leaving the organised technical schools which are under the control of Joint Committees to be considered in another section of this report. The operations of the schemes remaining to be considered here can be comprised under three heading, viz., (a) Scholarships, (b) Classes for National School Teachers, and (c) Itinerant Instruction. This being so it at once becomes apparent that the County Committees responsible for the administration of the Act in unurbanised towns have hitherto treated such towns as mere rural districts granting them an occasional course of instruction in domestic economy or manual instruction, but not attempting to make such courses of annual recurrence or to provide any instruction in elementary commercial subjects which is as badly needed in the small towns as in the larger ones. The reasons for this neglect of the small towns are fairly obvious. In the first place representatives of the commercial community are rarely found on County Committees, and in the second place the business people themselves in the small urban areas are scarcely yet alive to the fact that their young people have any need for special training in commercial subjects. Thus whilst the need exists, the local demand has not been made. Meanwhile the organising officers of the schemes, lacking the needed stimulus, take no steps to cater for the special needs of unurbanised towns and find ample excuse for their supineness in the matter in the difficulty of securing suitable and permanent accommodation for classes and qualified teachers to give instruction. The time has however arrived when County Committees may reasonably be expected to make an effort to establish small technical schools in towns with a population of 1,000 and upwards. There are, of course, difficulties to be overcome, but they are not great when compared with those already surmounted in other directions by the same Committees, and the attendance grants now being earned under Section II. (b) of the Department's Programme for Technical Schools, etc., should help to smooth the way.

(a) Scholarships.

Boys' scholarship schemes were in operation in the counties of Kilkenny and Carlow. The scholarships awarded under the Kilkenny Scheme are tenable only at the Kilkenny Trades Preparatory School. Seven of these were awarded to boys living in the county area at a cost of £68, and the value of the scholarships varied from £8 to £12 according to the distance of the scholar's home from Kilkenny. One £12 scholarship was not taken up, and two £8 scholarships were resigned early in the session. For several sessions the bulk of the scholars in the Trades Preparatory School were drawn from rural districts, but of late rural candidates for the scholarships have been fewer and urban candidates more numerous, and a larger proportion of the scholarships have been awarded to boys living in the urban area. Whilst this change in the personnel of the pupils is welcomed as indicating a better appreciation of the advantages offered by the Trades Preparatory School on the part of the inhabitants of the city, it is recognised that the change has been accompanied by a lowering of the educational standard of the entrants to the school. As an inducement to the scholarship-holders to complete their three years' course in the Trades Preparatory School, the Kilkenny Scheme provides two prizes of £10 to be awarded to the two boys who have been most successful during their scholarship career. These prizes only become payable when the boys have entered on an apprenticeship or taken up industrial employment under conditions approved by the Committee.

In Carlow during this session a sum of £120 was expended in providing seventeen second-year scholarships tenable at approved secondary schools. No provision was made for awarding new scholarships.

Seven Domestic Economy scholarships were awarded under the Wexford scheme, and all were held at the Kilmore School of Domestic Training in the south of that county. Ten Domestic Economy scholarships were awarded under the Carlow scheme. Of these two were held at the Moate School, two at the Charlemont Street (Dublin) School, and the remaining six were tenable at the Stradbally School. There is no difficulty in securing a full supply of suitable candidates for these scholarships which indicates that the benefits conferred by the year of residence in the training school are known and appreciated. The county scholars as a rule return to their homes at the conclusion of the period of training. It is therefore not unreasonable to expect that these domestic economy scholarships are slowly but surely helping to raise the standard of comfort in the homes of the rural population of Carlow and Wexford.

The Carlow scheme allocated £50 to provide Art scholarships to enable pupils, who had displayed exceptional ability and made highly satisfactory progress in special courses in Drawing in local secondary schools, to continue their studies in advanced art subjects with the ultimate intention of qualifying for a Teacher's Drawing Certificate. Two scholarships were awarded and were held in the newly opened Day Art Classes of the Kilkenny Technical School.

(b) *Classes for National School Teachers.*

A class for the training of National School Teachers in a second year's course in experimental science was successfully conducted in the Kilkenny Technical School. Well attended classes in domestic science were conducted under the auspices of the Carlow Committee in the Carlow Convent of Mercy and the Tullow Brigidine Convent and Classes in rural science (including school gardening) were conducted in Naas, Athy and Tullow by an expert instructor employed by the Department.

(c) *Itinerant Instruction.*

In the last report on this district mention was made of the slackness which characterised much of the organising work connected with the short courses of instruction conducted by the itinerant instructors. In some respects improvement has since been noted, e.g. (1) the tendency to curtail courses in domestic economy has disappeared in Wexford though it still lingers in Wicklow; (2) the tendency to lessen unduly the hours of teaching was not in evidence in any of the counties during the session; (3) registers for recording the exercises worked by the students, and noting their progress, have been used in a few of the counties; (4) there has been a distinct attempt to put second-course domestic economy students through a more advanced syllabus than that followed by first-course students; and (5) the practice of utilising National Schools for courses in domestic economy has apparently ceased in Wexford and Kilkenny though it is still met with in Carlow and Wicklow. In other directions however it is not possible to report much improvement. The preparation of the classrooms has not generally received sufficient attention. The injurious effects of unsuitable and unprepared accommodation are most pronounced in the cookery classes. It is to be regretted that instructresses are so often wanting in a just appreciation of the extent to which their reputation as teachers, and the dignity of the work they are engaged in, suffer when they are content to carry on their instruction under conditions which militate against the success of their teaching and counteract the good they are trying to accomplish. The practice of admitting to afternoon classes in domestic economy National School pupils who are fatigued with the strain of their day's work in school, and in need of a substantial meal, is still prevalent in Carlow, and has not disappeared altogether in Wicklow. Cases have been noted where National School pupils have been under instruction from ten o'clock in

the morning until a quarter to eight in the evening, with three short intervals amounting in all to an hour and a quarter. Comment is here superfluous.

There has been no general increase in activity in the opening of new centres of instruction in rural districts. Noteworthy features in this connection are the steadiness and extent of this particular work in Wexford and the non-appearance of any new centre in Kildare this session. To explain the latter fact it may be stated that financial considerations obliged the Kildare Committee to dispense with the services of a manual instructor for the session, and to refrain from filling a vacancy caused by the resignation of an instructress towards the close of the evening school session. The way in which this work has progressed during the last year is shown in the accompanying table, which also includes the figures for the three preceding years.

SUMMARY OF NEW CENTRES OPENED IN THE LAST FOUR SESSIONS.

COUNTY.	Number of new centres opened.			
	In 1908-9.	In 1909-10.	In 1910-11.	In 1911-12.
Carlow	6	4	2	3
Wexford	9	7	6	7
Kilkenny	8	9	2	1
Kildare	3	8	2	0
Wicklow	1	2	2	2
Totals	27	30	14	13

It may be added that ten of the new centres were opened by domestic economy courses and three by manual instruction courses—a proportion which has not been uncommon in the past.

During the session the manual instructors have visited 22 centres and conducted 43 thirty-lesson courses in woodwork and technical drawing, whilst the domestic economy instructresses have visited 28 centres and given the equivalent of 70 complete courses in domestic economy subjects. There has thus been a decrease of 5 courses in manual instruction and 14 courses in domestic economy as compared with the corresponding numbers for the session 1910-11. Amongst the causes contributing to the lessening of the amount of instruction in domestic economy in rural districts may be mentioned a temporary decrease in staff in Kilkenny and the partial employment of an Instructress to give instruction in urban cottages in Carlow. The foregoing facts are set out in the following table side by side with the corresponding figures for the two preceding academic years.

SUMMARY OF WORK DONE IN TEMPORARY CENTRES DURING THE LAST THREE SESSIONS.

COUNTY.	No. of Centres visited.			No. of M.I. Courses Given.			No. of D.E. Courses Given.		
	1909-10	1910-11	1911-12	1909-10	1910-11	1911-12	1909-10	1910-11	1911-12
Wicklow	5	6	6	7	7	8	5	6	4
Wexford	13	13	12	6	9	12	22	24	21
Kilkenny	20	19	14	13	15	11	22	22	16
Carlow	14	12	11	9	9	10	20	21	18
Kildare	15	11	6	6	8	2	18	11	11
Totals	67	61	59	41	48	43	87	84	70

The efficiency of the teaching in the temporary centres varies considerably—in some cases it is excellent, but it very rarely falls below a satisfactory standard.

URBAN DISTRICT SCHEMES, INCLUDING TECHNICAL SCHOOLS IN COUNTY AREAS.

Organised Technical Schools under the direction of specially appointed superintendents or principals exist in all the urban centres except Carlow. The school premises have been partly or wholly built expressly for the accommodation of technical classes in all the towns except Arklow and Kilkenny. In each of these places rooms in three separate buildings have to be requisitioned for the use of the classes. In such circumstances the labour normally incidental to the organisation and superintendence of evening classes is augmented, and, in addition, obstacles varying in kind and magnitude have to be surmounted in attempting to render the class-rooms attractive and sufficiently convenient to enable teachers and students to work in comfort. The inconveniences of such unsatisfactory accommodation are felt with increasing force as the work of the schools progresses. Efforts to extend the operations of the schemes are hampered, with the result that the staffs become discouraged and the appearance and order of the class-rooms receive less attention than heretofore. Plans have been approved for a school at Arklow, but some time must elapse before it can be erected. In Kilkenny no very definite step has yet been taken towards the erection of a suitable school.

Day Art classes were opened for the first time during this session in Kilkenny, and a fair number of genuine art students took advantage of the increased facilities for instruction in advanced art subjects. Hitherto the tendency in the higher stages of the art course in this centre has been towards pictorial art, but the possibility of developing some artistic handicraft work is not remote.

The Department's Programme for Technical Schools, etc., continues to exert a great and beneficial influence on the efficiency of the technical schools. Through its working many omissions and defects in organisation have been brought to light. The contrast between the number of students attending the introductory course classes and the number put forward for recognition as grant-earning students has been so striking in some schools as to lead to inquiry and the discovery that the classes were flooded with day scholars to the great injury of the interests of ordinary students. A comparison of the number of qualified students in each course during one session with the corresponding numbers for the succeeding session reveals in an unmistakable manner the leakage of suitable students. The leakage of qualified first year students from the technical schools of this district gives an average of 58 per cent. whilst for individual schools it varies from 28 per cent. in New Ross to 78 per cent. in Arklow. These figures refer to the first year students of the schools as a whole. When the inquiry is restricted to special courses some striking results are noted, e.g., in one school with an apparently flourishing art department there were in 1910-11 eight qualified first-year students in the art course, whilst the returns for 1911-12 show no qualified second-year student in this course. An investigation into the causes producing such a result can scarcely fail to lead to the discovery of opportunities for improvement in teaching or organisation.

SECONDARY SCHOOLS.

The number of secondary schools taking experimental science and drawing in this district has been reduced from thirty to twenty-nine. The last school to disappear from the list is a small mixed one situated in a remote and sparsely populated district and depending upon local support to eke out an insufficient endowment. The regulations require all these schools to take a two years' preliminary course in experimental

science and drawing, and, in addition, either a concomitant auxiliary course for first and second year pupils, or a specialised course for third and fourth year pupils. The main facts regarding the introductory courses are shown in the following:—

SUMMARY OF PRELIMINARY COURSE CLASSES.

SCHOOLS.	EXPERIMENTAL SCIENCE AND DRAWING.		MANUAL INSTRUCTION.		DOMESTIC ECONOMY.	
	First Year.	Second Year.	First Year.	Second Year.	First Year.	Second Year.
Boys', .	17	17	10	10	—	—
Girls', .	11	11	—	—	3	4
Mixed, .	1	1	—	—	—	—
Totals, .	29	29	10	10	3	4

This summary differs from that for the previous academic year in two particulars, viz., there is an increase of two in the number of second year manual instruction classes and a decrease of two in the number of first year domestic economy classes.

Specialised courses were taken in twelve boys' schools, and in all the girls' schools except one. Three schools which had carried on such courses in the preceding session for few pupils, and with indifferent success, dropped them this session rather than continue them in an inefficient manner. Six specialised courses were presented in two girls' schools; five in one girls' school; four in three girls' schools; three in two boys' and one girls' schools; two in three boys' and one girls' schools; and one in seven boys' and two girls' schools. The number of schools presenting each of the specialised courses will be seen from the following:—

SUMMARY OF SPECIALISED COURSE CLASSES.

SPECIALISED COURSES.	BOYS' SCHOOLS.		GIRLS' SCHOOLS.		MIXED SCHOOLS.	
	Third Year.	Fourth Year.	Third Year.	Fourth Year.	Third Year.	Fourth Year.
Chemistry, . . .	7	2	—	—	—	—
Physics, . . .	2	1	—	—	—	—
Mechanics, . . .	1	—	—	—	—	—
Drawing, . . .	6	—	6	4	—	—
Domestic Economy	—	—	8	7	—	—
Physiology and Hygiene, . . .	—	—	4	4	—	—
Botany, . . .	—	—	3	—	—	—
Geography (Physical and Commercial)	—	—	—	—	1	—
Totals, . . .	16	3	21	15	1	—

In connection with this summary it may be noted (1) that domestic economy as a third year subject has disappeared this session from the curricula of three girls' schools, squeezed out in at least one case by the necessity for giving more time to the teaching of mathematics for Intermediate Examinations; and (2) that drawing as a third year subject in boys' schools continues to increase in favour at the expense of chemistry, a matter that will give rise to little regret from an educational standpoint when the calibre of the schools concerned is taken into account.

From time to time it has been noted that laboratories and workshops have been used for the teaching of subjects other than experimental science and woodwork, and the practice seems to be extending. There is, of course, no need to raise any objection to such procedure where there is no interference with the use of the workshop or laboratory as originally intended, but the case is otherwise when the normal equipment is displaced or removed to another room, the approved arrangements altered, and the convenience of the rooms for the teaching of the subjects for which they were sanctioned, lessened considerably by the intrusion of additional desks and other furniture.

PRIMARY SCHOOLS.

Examinations in Drawing were conducted in the primary departments of two girls' schools and twelve boys' schools. Five schools presented pupils up to Standard V., one up to Standard VI., and one up to Standard VII. Pupils are found in Standards VI. and VII. only where there is no organised secondary department in the school. The total number of pupils entered on the examination schedules was somewhat less than in the preceding session. Of the pupils entered on the schedules 86 per cent. were actually presented for examination.

The two girls' schools were classed as Excellent, as in the preceding session. Of the boys' schools four were classed as Excellent and eight as Good. This classification also agrees with that for the previous year, but the fact that four schools were cautioned that the grant would be reduced unless a higher standard should be attained in the coming session indicates some falling-off in the efficiency of the teaching in these schools. In each case the lowering of the standard was connected with changes in the teaching staff.

Reviewing the work of the schools as a whole, it may be noted that Drawing is very fair in Standard I. and good in Standards II. and III. Freehand is good in Standard IV., but appears to receive less attention in Standard V. where it is not so satisfactory. Scale Drawing in Standard IV. is only fair—the weakness arising mainly from indifference to accuracy and precision. The teaching of Model Drawing and Practical Geometry in Standard V. is generally loose and ineffective.

Slates were used in Standard I. in half of the schools. In several instances the slates available were ill-suited for use in the drawing lesson. The method of cleaning slates generally adopted in the boys' schools, and the slovenly manner in which the drawing books are kept, bespeak lost opportunities for training the pupils in habits of cleanliness and order. It is more difficult to draw on a slate than to draw on paper, and for this reason, if for no other, it is much to be desired that the use of slates in the drawing lesson should be discontinued.

MR. M'GANN, *Junior Inspector (West Central District)*, reports:—

COUNTY SCHEMES.

In the eight counties of the West Central District Technical Instruction Schemes continued in operation. During the session sixteen Domestic Economy teachers, two teachers of Home Dressmaking, one teacher of Home Nursing, twelve Manual Instructors, three teachers of Commercial Subjects and four teachers of Crochetwork were employed conducting classes at itinerant centres; Boy Scholarships were awarded in six counties, a Technical School was maintained at Mullingar; and a Residential School of Domestic Training at Moate.

Year after year the same difficulty is experienced in endeavouring to secure accommodation for itinerant classes. Few centres are provided with suitable workrooms, none with teaching kitchens. Domestic Economy is usually taught after school hours in the local schools under conditions animadverted upon in previous reports, and Manual Instruction in unoccupied stores, often difficult of access, insufficient in size and ill adapted to the purpose. Except in Clare, Connemara and Westmeath where cottage instruction of a highly useful and efficient type is successfully given, the Domestic Economy teachers usually limit their instruction to class work. The attendance at the classes is satisfactory, the instruction suited to the home needs of the pupils and the efforts of the teachers laudable, but it is to be regretted that more visiting is not done and "house" classes more frequently held. In many of the poorer districts of the West further improvement can scarcely be effected until the essentials of a healthy existence are impressed on the minds of housekeepers by tactful and sympathetic visitors. Manual Instruction retains its popularity, and in rural districts the services of the teachers are in request. Except in the busy seasons the night classes are well attended by young farmers desirous of acquiring skill in the use of tools, the majority of whom after attending two courses can make doors, window frames and sashes, gates, barrows, tables and presses of a simple character. At the evening classes for boys the attendance is not so satisfactory, and the educational value of the training does not always receive the attention it deserves; the importance of drawing is not fully appreciated, and the tendency is to complete small articles rather than to make them accurately and well.

Commercial teachers employed in Clare, Roscommon, and Westmeath gave instruction in Book-keeping and Business Methods at various town centres. The classes were on the whole satisfactorily attended by pupils of a desirable type, and the instruction imparted was eminently practical and well calculated to improve their business capacity.

In Mayo only can crochet classes be regarded as successful. The class at Granard gives remunerative employment to a small number of workers, but affords no indication of expansion; the efforts to establish a class in Leitrim have been so far unsuccessful, and a class at Athenry has failed.

Thirty-five boys held county scholarships and made satisfactory progress in the courses of instruction followed. Those held at Trades Preparatory Schools were renewed for another session. Five counties have adopted the revised scheme which limits the scholarships to pupils prepared to attend schools where the courses of instruction are specially designed to meet the needs of those about to follow industrial careers.

At Mullingar classes in Domestic Economy, Introductory, Building Trade and Commercial subjects were held during the winter months, but the inconvenient, uninviting and unsuitable nature of the accommodation constituted a serious hindrance to attendance and impaired the efficiency of the instruction. The high standard of utility that characterized the work of the Monte Residential School of Domestic Training was well maintained, and the scholarship holders who attended it received an excellent training in every branch of Housecraft as well as in Gardening, Dairywork, and Poultry rearing.

Whilst the teaching of Domestic Economy and Manual Instruction in the country districts is as satisfactory as can be reasonably expected under existing conditions, it must be noted that no serious effort is made to meet the pressing need of suitable halls for the housing of the classes. Until convenient and inviting class rooms are provided it is vain to expect regular and punctual attendance from pupils who, after their day's toil and often in bad weather, have to walk long distances through fields and bogs to avail of the instruction. The want of success that has attended the efforts to establish lace industries was to be expected, and need not be regretted. The centres where female labour is in excess of home and farm demands, had been previously provided with expert instructresses of trained ability, and in agricultural districts it is much more important

that future wives and mothers should be afforded facilities for becoming good housewives, vegetable gardeners and poultry rearers.

URBAN DISTRICT SCHEMES.

In the urban districts of Athlone, Galway, and Sligo independent schemes were in operation, and organised courses of instruction followed. In the other urban districts instruction was provided by joint Committees for the urban and county areas but, owing to the low educational attainments of the pupils joining the classes, organised courses were found practicable only at Ballinasloe.

At Athlone no further improvement was effected in the accommodation although available space was occupied by idle machinery; Domestic Economy classes were re-opened, satisfactorily attended, and successfully taught; Preparatory, Commercial, and Trade Classes were continued; the attendance at the Trade Classes was negligible, but the others did good work and are full of promise.

At Galway some structural alterations were effected in the old dwelling house that serves as a Technical Institute, the most was made of the accommodation, a special rate was struck for the erection of a new building, a site was chosen and plans prepared. The Introductory classes were well attended and excellently taught; the re-organisation of the Commercial classes and the appointment of a specially qualified instructor as Head Master led to increased efficiency, and this section is now conducted on sound lines; the Trade Classes opened late in the session and in very unsuitable rooms, the attendance at them was small but regular, and the progress good. The organisation and teaching of the Domestic Economy classes was so much improved that although eleven classes were held weekly many applicants were refused admission. The attendance at the Art and Science sections remains small. Special classes in Drawing, Science, Manual Instruction and Domestic Economy for school teachers were held on Saturdays and were much appreciated.

At Sligo a Day Trades Preparatory School, an Evening School, and Saturday classes for teachers were continued in suitable and convenient premises. The day school was attended by county and urban scholarship holders; comfortable lodgings, regularly supervised by the Head Master, were found for pupils absent from home; carefully designed courses of instruction were followed by all, and visits to works were occasionally arranged. The progress of the county scholars was excellent, and that of the urban scholars satisfactory. Notwithstanding that pupils trained in the school are sought by employers, and that free places entitling the holders, to tuition, books and stationery are offered to pupils of sixth standard attainments, the candidates from the urban districts are few and not of the best type educationally. In the Evening Technical School the organisation of the Introductory Classes was not quite satisfactory; the disparity of the attainments and the irregular attendance of the very many pupils admitted rendered collective teaching difficult and impaired the efficiency of the instruction in Arithmetic and English. The attendance at the Trade Classes was not as good as in the previous session, but the pupils were of the right type and the teaching good. The Art and Pure Science classes were poorly attended, although the teachers are highly qualified. In the Commercial section the Classes were well attended by pupils keen on their work. Except in the suburban district of Forthill, and at the special course for girls about to become domestic servants, the attendance at the Cookery and Laundry lessons cannot be regarded as satisfactory; Home Dressmaking, however, continued to attract pupils of the most desirable kind. The Saturday classes for Teachers were fairly attended, and the progress of the teacher students was creditable.

At Ballinasloe Technical School the attendance at the Commercial and Domestic Economy classes may be regarded as satisfactory, and at the Introductory and Trade classes as fairly so. The pupils who attended the

latter are of the right type, but the standard of their general education is low, and as yet they have not been induced to repair its defects by preliminary training.

On the whole the course system has been productive of much good by causing teachers to think out for themselves syllabuses adapted to the requirements of pupils attending their schools, but except in the Introductory and Commercial classes few pupils in this district are found able to pass, or willing to sit for, the examination necessary for grant registration. In the Domestic Economy and Trade sections of the schools the amounts earned are so small that Committees are arranging to avail of the smaller grants payable on separate subjects. The future hope of Technical Instruction in the West must depend largely on the successful working of Introductory classes, and it is found extremely difficult to induce apprentices and young artisans to join them. Even where special classes for painters and tailors have been formed under expert teachers, good progress was practically impossible owing to the pupils' want of knowledge of the rudiments of English and Arithmetic, yet they could not be induced to attend instruction in these subjects at classes strictly limited to their own trades.

At Ballina, Castlebar, and Westport the Domestic Economy, Commercial and Manual Instruction classes opened last year were continued but were not as freely availed of as the population of the towns would lead one to expect. At Longford and Granard provision was made for instruction in Drawing, Woodwork and Domestic Economy, and the classes were successful; at these centres also capitation grants were paid to the managers of Industrial classes for girls. At Ennis highly successful courses in Domestic Economy and fairly successful ones in Commercial subjects were given by the county teachers. At Kilmashogue a Home Sewing class was aided by capitation grants, and good courses in Domestic Economy and Manual Instruction were also provided.

SECONDARY SCHOOLS.

Twenty-seven schools in this district followed the Department's programme. The courses adopted and the results achieved were practically the same as those of the preceding session.

On the whole the laboratories and workrooms were satisfactorily kept: few additions were, however, made to the stocks of apparatus originally provided, although the importance of the provision of adequate supplies to enable all the pupils in First and Second Year classes to carry out simultaneously the same experiments cannot be over-estimated. Repeated references to the necessity for "going" clocks, and rough benches for the making and repair of simple apparatus, have had no effect.

The defective organisation mentioned in last year's report was still noticeable in some schools. Pupils, the standard of whose general education is low, are admitted to the First Year course, notwithstanding that they themselves derive little benefit from the instruction and impede the progress of others. Little improvement has been effected in class and laboratory preparation; nor, indeed, can it be hoped for in those schools where science masters are expected to devote many hours each day to imparting instruction in other subjects. Actual teaching is well done; the spirit of the syllabuses is appreciated, less attention is paid to "cramming" and the pupils are encouraged to observe, think, and reason for themselves.

Except in a few schools the equipment necessary for efficient instruction in Drawing is now complete, and, notwithstanding the difficulties experienced in securing the services of competent teachers, the instruction is on the whole very satisfactory. Graded schemes of exercises are almost invariably prepared, small cards are now never met, the teacher's examples on the Blackboard are gradually displacing charts, the geometrical models are sparingly used, and interesting objects are freely employed.

Of the five Girls' Schools in this district, four give instruction in Domestic Economy. The kitchens and workrooms are models of neatness and order,

and the teaching maintains the high standard of previous years. One has a Higher School of Domestic Economy attached where girls who have completed a secondary school education receive fuller training in Housecraft, Marketing, Expenditure of Income, Dairying, etc., and where admirable work is done.

Instruction in Woodwork was provided in eleven schools, ten of which have good workshops attached. The teaching was efficient and the educational value of the training high, but, as the subject is not recognised for an "Intermediate Pass," and as managers find the grant insufficient to entirely pay for the instruction, it will be dropped by the majority of the schools which introduced it only to meet the requirements of county scholars.

PRIMARY SCHOOLS.

Instruction in Drawing was given in eight schools; four of these were adjudged "Excellent," and four "Good." In Standard I. slates were seldom in evidence; increased efficiency was noticeable in Standards I. to IV. Free Drawing was well taught and creditable progress was made in Mechanical Drawing. Drawing Boards and T Squares are being introduced in Standard IV., and the majority of the pupils in this Standard make very good drawings to scale. In Standard V. Object Drawing cannot be regarded as satisfactory; in many cases the desks are unsuitable, schemes of exercises are not prepared and proper objects are not provided.

Instruction in Woodwork was given in four schools. The accommodation is excellent, the teaching was efficient, and the pupils were carefully trained to observe the nature, growth, and structure of trees, to make and read working drawings correctly, and to construct accurately models in wood.

MR. INGRAM, *Junior Inspector (North Central District)*, reports:—

COUNTY SCHEMES.

The County Schemes of Technical Instruction continued to provide instruction in Manual Work, Domestic Economy, and Commercial subjects: the classes in Commercial subjects were well attended by an admirable type of student, and the increased demand for this instruction indicated a general desire on the part of the students to become acquainted with systematised methods for conducting small businesses on sound commercial lines.

The ages of the students varied between sixteen and twenty-four years, and it was generally noted that the action of the Committees, reserving the short courses of instruction for those students who had left the day schools, was a wise one, since it permitted the instruction to be more highly specialized and successful, and tended to promote a more regular attendance at the classes.

Very little definite improvement was effected in the accommodation provided for Itinerant Instruction: wherever available, village halls were requisitioned for this purpose. These gave very fair facilities for the work; but usually the teachers were obliged to use sheds, stores, etc., in more or less bad repair, and to work under very harassing conditions. Considerable help and encouragement were given to the teachers by the members of local Committees; this was particularly noticeable in the King's County and the Counties of Louth and Meath, in which many highly satisfactory and well attended courses were conducted.

In the towns of Birr, Tullamore, Maryborough, and Navan, instruction on the lines previously in operation was continued. At the Birr Technical School, a very definite advance was made in the character of the work done and also in the numbers of students attending; but the other centres were seriously handicapped by the accommodation provided, the temporary character of which has outlived the conditions for which it was designed, and has ceased to lend itself to the needs of present day requirements.

Girls' Scholarships were offered by the Queen's County and the County Dublin Committees—the Scholarships were held at the Residential Schools of Domestic Economy at Stradhally (Queen's Co.) and at Charlemont Street (Dublin): the fullest advantage was taken of the instruction offered, and highly satisfactory results were obtained. Boys' Scholarships were renewed for a third session by the Queen's County Committee; but no new Scholarships were awarded.

The continued success of Technical Instruction in King's, Queen's, Louth and Meath Counties was due to a considerable extent to the efficient and careful methods employed by the administrative officers in charge of these areas.

The County Dublin Scheme was run on exactly similar lines to those of previous sessions and showed no signs of keeping abreast of the progress that has been effected in Technical Education in every other county in Ireland.

COUNTY BOROUGH AND URBAN DISTRICT SCHEMES.

In the larger Technical Schools, a general advance in the direction of progressive technical training was made. The courses of instruction were, in most cases, carefully revised with the object of bringing them into even closer touch with local requirements than heretofore.

The increased grants earned by satisfactory attendance were usually devoted either to the purchase of equipment or to the increase of the teaching staff; in the latter respect, however, the policy of securing only the most highly qualified and technically trained teachers for special subjects was not always adopted.

Generally the Committees endeavoured to meet the increasing demands for specialised instruction, but the funds at their disposal do not allow of any wide extension of this work; and, in centres where new buildings have been undertaken, the heavy first charge on the funds to meet interest on, and repayment of, loans for buildings seriously curtails the scope of the work.

In all cases, the Committees encouraged, in a marked manner, the students to take up a course of study requiring attendance for two or three evenings per week at a technical school; and inducements and facilities were also offered whereby a student could follow a course for a period of three or four years; the response to those offers has not, as yet, met with any marked success, but the introduction of the new Technical School Examinations which have been based on the "course system" should assist the Committees in the attainment of their purpose.

The following numbers show the extent to which progressive courses have been adopted by the Students at the Technical Schools in this district:—

YEAR OF COURSE,	..	..	..	1st	2nd	3rd	4th and subsequent years.
Percentage of Students attending each	..	..	..	
Course, 1911-12,	..	..	..	69	20	7	4
Percentage of Students attending each	..	..	..	
Course, 1910-11,	..	..	..	66	23	8	3

Special Classes in Domestic Economy and Art for Teachers were provided at Dundalk Technical Schools; in Domestic Economy and Experimental Science at Kingstown Technical Schools; in Domestic Economy at Cabra Dominican Convent; in Art at the Christian Brothers Novitiate, Marino; and in Experimental Science at the Christian Brothers Schools, North Richmond Street, and the Blackrock Dominican Convent. The instruction generally tended to supply the teachers with a knowledge of the subject rather than to illustrate and inculcate the principles of teaching these subjects.

Day Trades Preparatory Schools were conducted in connection with

the Pembroke and Blackrock Schemes. The duration of training at the Blackrock School was shortened to a two year course owing to the fewness of pupils remaining over from the previous session.

Important changes were made by the County Borough of Dublin Committee, resulting in the re-admission of the Kevin Street, Rutland Square, and Chatham Row Technical Schools to the list of schools recognised for the purposes of earning attendance grants. The opening of the Bolton Street Technical School enabled the Committee to give proper accommodation for the Commercial Classes; and the fixing of Domestic Economy centres in different parts of the city helped to strengthen, to a slight extent, the most unsatisfactory part of the scheme, viz., the organisation of Domestic Training.

SECONDARY SCHOOLS.

The subjects taught in these schools were confined, as heretofore, to the Preliminary Courses in Experimental Science and Drawing, the Auxiliary Courses in Domestic Economy and Manual Instruction, and the Special Courses in Chemistry, Physics, Mechanics, Botany, Physiology and Hygiene, and Domestic Economy. A course in Physical Geography was added to the list of Special subjects, and this was adopted by five schools (four boys' and one girls').

(a) *Girls' Schools.*

Domestic Economy was provided by sixteen schools out of the twenty-six in this District. Of the former number, eight provided third and fourth year courses. Physiology and Hygiene was taught at five schools, in connection with three of which Domestic Economy was also provided. Chemistry continued to be preferred to Botany as a Special Course in these Schools.

(b) *Boys' Schools.*

The continued decrease in the number of pupils following the auxiliary course in Manual Instruction is the only point of importance in the work of the Boys' Schools to which reference need be made. The schools, from the curriculum of which this subject either disappeared or was seriously diminished, were in nearly every case attended by that class of pupil for whom this type of instruction was pre-eminently suited.

In all schools the equipment was maintained in a manner sufficient to meet the needs of the courses; but there was no observable tendency to provide apparatus beyond the minimum requirements. The almost general practice of using commercial acids in the Special Courses of Chemistry resulted in giving the pupils much inaccurate and untrustworthy knowledge.

The standard of teaching remained at the same level as heretofore. There were but few signs that those teachers who had secured permanent recognition were anxious to widen the scope of their knowledge of the subjects they were teaching. As noted in previous reports, the teachers, generally, did not make a practice of preparing beforehand either the subject matter nor the apparatus for their lessons, but relied on their general knowledge of the subject.

There was a decrease in the number of pupils who repeated courses; the total being 551 as compared with 614 for the previous session. The former number was composed of 404 boys and 147 girls as compared with 406 and 208 respectively in 1910-11.

PRIMARY SCHOOLS.

Twenty-three schools were examined during the session; of these three provided instruction for pupils in Standards I. to IV.; seventeen for pupils in Standards I. to V.; and three (the Industrial Schools) for pupils in Standards I. to VII. Eight Schools provided instruction in Manual Work.

The average number of pupils under one qualified teacher for all standards was 76; but, in Standards I. and II. of the larger Schools, the number under one recognised teacher frequently exceeded 100.

Generally the instruction in both these subjects maintained the satisfactory standard of efficiency recorded in previous sessions.

SUMMARY OF ART INSPECTORS' REPORTS:—

PRIMARY SCHOOLS.

During the year, Drawing was taught in some 84 Primary Schools working under the Department's regulations, 15 of these were Industrial Schools, and in nearly all of these Schools the work was carried on up to the VIth or VIIth Standard, but in most of the other Schools the course finished at Standard IV., owing, principally, to the fact that when pupils reached that standard they were drafted into the Secondary Schools. The instruction has been conducted in an efficient manner, and the quality of the work produced affords ample testimony to the care and attention of the teachers and to the industry of the pupils. While the time devoted to practice is very limited, and the classes are as a rule very large, the subject fulfils a definite purpose in the school programme, and provides sound training the value of which is increasingly evident.

In general, satisfactory progress has been made in the teaching of Free-hand and Mechanical Drawing, but in the few schools in which Object Drawing is taught, progress has been retarded by the unsuitable nature of the desk accommodation provided.

SECONDARY SCHOOLS.

Steady progress continues to be made in the teaching of Drawing in the Secondary Schools. In the Preliminary Courses, Freehand Drawing and Pattern Drawing, Memory Drawing and Object Drawing have been taught with success in most schools, and excellent work has been done in these divisions of the syllabus in some schools.

A greater number of teachers have drawn up good schemes of work, and in general greater attention has been paid to the suggestions in the syllabus. Most of the teachers have realised the use of Freehand Drawing as a preliminary to Object Drawing or as a means of storing up a knowledge of ornament to be used later in design. The value of Memory Drawing has been appreciated, but it is regretted that in some schools this subject has not been continuously practised throughout the year. More Schools started the teaching of Object Drawing early in the first year course, owing to better preliminary training in Drawing of the pupils on admission to the Schools, and also to greater appreciation of the educational value of the subject by the teachers. Progress in the successful teaching of this subject in the Preliminary Courses is however still retarded by the lack of suitable desk accommodation in many schools, which are moreover, almost without exception, entirely devoid of good reproductions of works of art, or suitable examples of an artistic type as a means of stimulating the sense of beauty and of good taste. This is to be regretted, and more especially so, as the majority of pupils do not take drawing beyond the second year of the Preliminary Course. The teaching of Geometrical Drawing has been satisfactory, from an executive point of view only, in many schools, and has been regarded too largely as a matter of dictation rather than the analysis and application of geometric constructions. The number of schools in which drawing boards and T square, are used has slightly increased, but too many are still content to do without this equipment.

The Special Courses in Drawing were taught in practically the same number of schools as last year, and, as in former years, the majority of these were girls' schools.

Object Drawing was the most successfully taught portion of the syllabus, and some interesting exercises, consisting of drawings of objects, with their usual surroundings, were excellently executed.

In Design many remarkably good exercises, based on plant forms and showing decided individual talent, have been executed. Most of the designs, however, were over elaborated, and the value of simplicity and well formed plain spaces, in contrast with ornament, was not generally appreciated. The teaching of the subject generally lacks systematic treatment, and it is essential that teachers should give more thought to the preparation of the lessons, in which definite conditions should be laid down for each exercise to be worked.

Plane and Solid Geometry was fairly taught, but there is a tendency to rely too much on the usual text books, rather than teaching soundly the principles of construction and projection by means of exercises either well selected or designed by the teacher.

DAY TRADES PREPARATORY SCHOOLS.

Drawing has been very satisfactorily taught in most of the classes in these schools. The importance of making good, clear and concise dimensioned sketches has been more fully recognised. This portion of the courses in drawing, however, leaves most room for improvement, as yet the use of sections is not fully availed of, and in some schools is not understood. There is room for improvement also in Memory Drawing; only a few of the Schools have realised the value of this important branch in the study of drawing, and it is to be regretted that in several of the schools Free Drawing from objects in the round has not been continued beyond the second year.

The colouring of mechanical drawings has been practised with success in a few schools; in some cases, however, the teachers have attempted to secure elaborate shading, instead of adopting the simple and direct methods employed in workshops and offices.

The teachers generally have studied the requirements of their pupils and have arranged the schemes of exercises accordingly, and, as in previous years, the work in drawing has been as far as possible arranged to have a direct bearing on the trades carried on in the locality in which the School is situated. In centres where the trades or industries are large or well defined, little trouble is experienced in arranging the scheme of drawing to suit the majority of the pupils. In the other centres this is not easy; good, and generally fairly successful attempts have, however, been made to meet the pupils' various needs.

It is felt that there is too decided a bias towards drawing suitable to the requirements of engineers and mechanics in most of the schools, and that more careful study of the districts would reveal a need for more training in drawing and modelling suitable to some of the other trades, such as Painting and Decorating, Cabinet-making, Plasterers' work, and Stone Cutting, etc.

ART CLASSES IN TECHNICAL SCHOOLS.

During the past year Drawing and Art Classes were in operation in connection with 70 Technical Schools and 5 Training Colleges; there were also Drawing Classes for pupils attending the Schools of Commerce, and one separated Art Class.

As in former years the Classes in these schools have met the requirements of various types of pupils, and it has been noted that the instruction is being more suited to the needs of the different localities. The majority of the pupils attending these classes are engaged in trades and industries in which a knowledge of drawing is useful or essential. A large number who wish to become teachers attend, and a comparatively small number are studying Art as part of their general education. In the case of the first two types of pupils the teaching has been in general successful; it has been noted however that persons joining for instruction in drawing and Art for use in specific trades have withdrawn where the instruction was limited to academic methods. On the other hand many have secured considerable advantage and promotion in business where they have followed well defined courses adopted to their immediate requirements.

In general, however, the elementary stages of drawing, modelling and design have been most successfully taught in most classes, and it has been noticed that in a few schools pupils who have been through the drawing courses in Secondary Schools have joined. Consequent on their previous training these pupils have been able to begin at a higher stage in the Art Courses, and in one school drawing heads from life has been carried on with fair success. A few pupils have gone on to the Schools of Art from these Art Classes.

Successful work has been done in several of the Art Crafts, such as Woodcarving, Lace and Crochet-making, etc., and pupils are more generally realising the importance of studying and learning to draw and design soundly in connection with their art, craft, trade, or other work.

In a number of the schools, classes in Drawing, for Teachers in National Schools, have been held on Saturdays, and much useful work in drawing of a suitable nature has been done in them. The teacher students generally have attended regularly, and many have gained certificates in drawing, in respect of their success at the examinations held at the end of the session by a representative of the National Board and one of the Department's Inspectors.

In the Training Schools, and at the Summer Courses, useful instruction has been given to intending Art teachers and to Art teachers already employed, and the effect of this instruction continues to produce good results in the Drawing and Art Classes generally, and emphasises the far-reaching and continuous effects of the training given.

SCHOOLS OF ART.

The Schools of Art generally continue to produce satisfactory work, and, as in former years, some excellent works have been executed in the larger schools. As heretofore the courses of study have been largely influenced by the Art Examinations of the Board of Education, South Kensington, and by the National Competition.

The Irish Schools have been, again, most successful in this competition, which gives the advanced students an opportunity of competing with the advanced students in the other Schools of Art in the Kingdom.

Four hundred and twenty-two Works were submitted for competition from the 6 Irish Schools of Art and from 5 of the Art Classes in Technical Schools. Fifty-four awards were gained, including 1 National Gold Medal, 5 National Silver Medals, 8 National Bronze Medals, and 11 National Book Prizes.

The "works" rewarded included Paintings in Oil-Colours, Models in clay, and Drawings of the human figure from life, Designs for Stained Glass, Enamels, Lace, Crochet, Darnask, and Book-illustrating, together with actual specimens in some of these crafts, and in addition Studies of historic styles of ornament, Studies from nature of plants and animal forms treated for design, Still Life Painting in oil-colours, Wood-carving from the cast, and Studies in Lettering.

Good works have also been executed in other branches of Art study, such as Water-colour painting of still life groups, Sketches of landscapes from nature, in oil and water colours, and in several of the minor crafts, Stencilling, Gesso-work, Leather Work, etc.

In Modelled Design the use and treatment of Architectural forms is not appreciated, and Architecture, although a predominating feature in the development of Art, receives very little attention in the schools. The Schools in Cork, Belfast, Limerick, Londonderry and Waterford are regarded as special institutions for the teaching of Art in all its bearings, although the last three named have not yet attained to the standard of efficiency conformable with the dignity of their position as centres of artistic energy.

Formerly, in several districts, Schools of Art were almost the only organised institutions in which instruction of a technical character could be had, and such subjects as Building Construction and Machine Drawing

were taught or supervised by the Art teacher. With the establishment of Technical Schools and the enormous advance in technical education throughout the country, this monopoly of attraction for technically inclined students no longer exists, and the Schools of Art must now bring their work into the scope of practical artistic requirements on the one hand, and artistic culture on the other. The cessation of the elementary Art examinations of the Board of Education, has removed an influence which had more or less stereotyped the teaching, and the Schools are now free to develop in accordance with local needs and local aspirations, and it is hoped that the authorities in the Schools will make a careful study of the requirements of their districts, and organise courses of Art instruction which will have the effect of developing design and craftsmanship on lines having as direct a bearing as possible on any existing local artistic handicrafts, industries, or trades in which a knowledge of Art is essential. The possibility of reviving old Art industries which may have existed in former times, and of encouraging the establishment of new ones, as well as providing classes for general artistic study, should also be kept in view in drawing up courses of work for the Art Schools.

MISS LOUGH (*Domestic Economy Inspector*) dealing generally with the Northern District, reports:—

DOMESTIC ECONOMY.

COUNTY SCHEMES.

Instruction continues to improve throughout the rural districts. In most counties classes are carefully organised and successful efforts are made to provide suitable accommodation. The work has assumed a more practical and comprehensive form, economy and utility receiving primary consideration. Simple lessons in Hygiene and Sick Nursing form a portion of each course. Note must be taken of the good work done by some Instructresses under difficult and often very discouraging conditions, every effort being made to overcome obstacles and make the most of available materials. Attendance at these classes has been generally satisfactory.

URBAN SCHEMES.

The course system is being adopted in the large majority of Technical Schools, with excellent results. The value of sound elementary training in all sections is recognised, consequently the work is more thorough, the merely ornamental being eliminated from all school programmes. Principals are realizing more fully the benefit of Domestic Economy instruction, and therefore providing more adequate accommodation for the various sections. Classes for National School teachers have been successfully conducted in many centres.

SECONDARY SCHOOLS.

The number of these schools in which Domestic Economy forms a portion of the school curriculum has increased. Instruction is well organised and carefully carried out. Adequate accommodation is provided, and equipments comprise all necessities for good work. The increased interest taken in this section of school work is most encouraging. The instruction comprises lessons in all branches of Household Management.

MISS K. BEVERIDGE (*Domestic Economy Inspector*), in speaking of Schools generally in the Southern District, reports:—

SECONDARY SCHOOLS.

The Domestic Economy Course has for some time past been arranged on steady progressive lines, suitable to the needs of students. The instruction given is invaluable to girls as part of their general education, and helps to inculcate habits of order, thrift, and self-reliance, besides making them generally better fitted to undertake home duties at the close of their school career.

Cookery and Needlework have up to the present received adequate attention, but Laundry-work has been somewhat neglected. Except in a few schools the teaching of this subject is too much confined to theoretical work, and the value of this branch of domestic work is not as fully recognised as it should be. It is hoped that practical laundry-work will be introduced into the Fourth Year Course in all Secondary Schools during the coming academic year, not only for the benefit of pupils, but also to help as a link between Secondary Schools and Technical Schools, in endeavouring to overcome in future what appears to be a prejudice against this branch of domestic knowledge.

The teachers were earnest, painstaking, and always willing to improve the standard of class-work, defects in teaching being chiefly due to lack of experience other than that gained by the teaching of the subject.

TECHNICAL SCHOOLS.

Generally the arrangement of classes is much improved, and it is apparent that the Preparatory Course, when well attended, is a valuable aid to Specialised Courses, improvement being noticeable in method, order, and in the working of home exercises. There is yet however much difficulty experienced in inducing students to attend courses in Domestic Economy rather than a class in one branch of the subject. More attention is now paid to the preparation of class-work and the correction of students' home-work.

Concurrent instruction of students of various stages of advancement is frequently found in the smaller Technical Schools. This evil can scarcely be overcome, as, frequently, the attendance at the more advanced classes in the Technical Schools is not sufficiently large to allow of separate classes being formed.

There is need for improved accommodation at Arklow, Wexford, Maryborough, Tipperrary and Tralee. In Carlow and Tullow, though class-rooms are good, there are frequent difficulties when several teachers working under different authorities use the one class-room.

Very satisfactory accommodation has been provided in Cork, New Ross and Enniscorthy, and, particularly in the first mentioned centre, has resulted in largely increased attendance.

In Limerick there is great need to centralise Domestic Economy classes.

ITINERANT COURSES UNDER COUNTY SCHEMES.

These short courses conducted in the various counties are still very popular, and usually well attended; much useful work is accomplished even in the short time at the disposal of the Instructress. The instruction is as thorough as can be expected in a limited period—endeavour is nearly always made at each course to teach Cookery, Laundry, Needlework and the elements of Hygiene and Housewifery in a simple manner likely to be of benefit in rural districts. It has been found that courses of six weeks' duration, the classes meeting every day, are more beneficial than courses extended over a lengthened period working two or three days each week—with the last mentioned, whilst allowing for more preparation of home-work, there is difficulty in maintaining interest and good attendance to the close of the course—in some cases falling off being due to local agricultural pursuits in which the women take part, *i.e.*, turf-cutting, fruit picking, and potato planting and digging; also students leave the district for domestic service or other occupations.

The difficulty of suitable accommodation is often met with, but latterly Committees have made great efforts, where village halls are not available, in having old buildings and barns re-constructed to suit the type of work. The formation of small local committees in rural centres is essential to the success of this work. Such Committees direct interest in their poorer neighbours and can help by arousing enthusiasm and getting pupils to attend from the beginning of the course. Where these Committees are not formed, though a fair sized class may ultimately be formed, the attend-

ance at the beginning is small and frequently irregular throughout the course, and thus much benefit of the course is lost to the district. Classes conducted in cottages for those who cannot attend the ordinary course, grow more popular each year. These classes, meeting for the greater part of the day, enable instruction to be given in the general care and management of a cottage and in the usual day's work, and have proved of much benefit to the locality where held. Unfortunately this scheme of instruction is not in operation in all counties. Different methods of working such classes have been tried—in some places a cottage is rented for the time and used to illustrate a "model" dwelling, in others, the work is conducted in dwellings which the people occupy. This latter method is better as it touches directly on the home life and surroundings of the people.

On the whole, rural classes are conducted in a very efficient manner, but generally a little closer attention to laundry work is desirable. There is much room for improvement in this section of the work, and it could be made more interesting than is sometimes found. The unpopularity of laundry classes in certain districts undoubtedly exists, and is apt to make some of the teachers lose interest in this section of their work.

RESIDENTIAL SCHOOLS.

The instruction imparted in these schools is of a useful type, but difficulties in applying general knowledge to everyday home life are still found. The need of "model" sleeping and living rooms in all such schools is obvious, as instruction given in Housewifery and only applied to dormitories and class-rooms is not sufficiently thorough. There is more scope for the practical teaching of Hygiene, Home-nursing, and First Aid. Numerous notes are of little value to girls of the type usually found in these schools, with the exception of the Waterford Higher Residential School, where the students are of a well-educated type.

It is gratifying, however, to note that this type of education is steadily improving and that a broader view of the future life of girls is being taken into account, whether the instruction is to be applied to the home or to help those who work for others.

MISS ANDERSON (*Inspector of Home Industries*), reports :—

INDUSTRIES CLASSES.

The past year has been marked by a certain shrinkage of Industrial work in the Midlands and in the West, and any extension has been limited to Ulster.

Instruction in Industries has now almost disappeared from the Leinster Schemes, and is steadily disappearing from the Technical Schemes for Connaught. It is regrettable to find that outside of Co. Mayo, little or no serious effort is now being made by County Committees for the organisation and development of rural industries in the West.

There have been fluctuations and periods of depression during the past session, consequent on industrial unrest during 1911-12; and these have affected many of our Industries Classes.

SPRIGGING.

The Sprigging Industry has suffered increasingly from the competition of foreign embroiderers, and from the growing employment of machinery. Only the finer grades of handkerchief embroidery have maintained their position unimpaired: there being a certain delicacy and finish in fine hand embroidery, that has not yet been attained by the machine.

A limited amount of the higher class linen embroidery for household purposes, and of blouse embroidery, has also given employment to centres in N. W. Ulster; but the withdrawal of the coarser grades of work has been a serious loss to the less skilled workers. Only those centres have held their own where instruction was thorough, and the industry well-organised.

There is reason to fear that, in future, only the higher grades of work will be supplied to country districts, and that the embroidery machine will take the place of the average sower.

It seems obvious that expert training of the workers, and sound organisation of business details, can alone enable this industry to compete with machinery, and save it from extinction.

MACHINE KNITTING.

There has been a slight increase in the number of Knitting Industries during the past session, but only in the larger centres has satisfactory progress been made. The adoption of garment-knitting, in addition to hosiery, at two of these centres, may be noted as a forward movement which has been attended with success.

DOMESTIC NEEDLEWORK.

No new classes have been opened in the past year, but sound educational work has been effected in established centres, more especially in North Limerick and Clare.

Instruction is much valued, and the classes are well attended.

LACE INDUSTRIES.

The Irish Lace Industries have generally done well during the past year. *Needlepoint Lace* has maintained a high position, and sales have considerably increased.

Limerick Lace has also been in great request, and some very good work has been produced, more especially in the leading schools in the Southern Counties.

Carrickmacross Lace.—The demand for really good Carrickmacross Lace continues unabated, and the supply of the work falls short of the requirements of the market. As a considerable amount of inferior work is produced in districts where the industry is not properly supervised, it is suggested that the systematic organisation of such centres would lead to good results, and place the industry upon a better and more profitable footing.

CROCHET POINT.

This variety of crochet lace has also been favoured by fashion. Some very nice work has been executed by expert lacemakers; but unfortunately the keen demand in the trade has sometimes led to hasty production and careless execution, thereby endangering the permanence of the industry. Its continued success must depend upon good technique and due attention to design.

LACE DESIGNS.

The importance of good design in the Lace industry can hardly be overrated. This has long been recognised by the more advanced lace centres; but there are still too many districts where roughly drawn and inartistic patterns are in use.

Efforts are now being made by the Branchardiere Committee to remedy this defect by utilising some of the fine Lace examples in the Dublin Museum as models for working designs.

CROCHET.

The Irish Crochet Industry has had to contend with many difficulties during the past session.

Trade depression, following on industrial unrest; increasing foreign competition, both open and underhand; and the influx of machine-made imitations, have all effected the Crochet industry in varying degrees, and many centres have suffered to a greater or lesser extent. Still, in spite of fluctuations due to the above-mentioned causes, the Clones Crochet industry has fairly held its ground, and even made progress in districts where the

finer grades of work are produced, and where the industry is properly organised.

Under such conditions, fair wages have been earned, and the industry has supplied much-needed employment in many poor districts.

The revived demand for good raised crochet may be noted.

CROCHET TEACHERS.

As foreign competition seems likely to increase rather than diminish in the future, the efficiency of our crochet teachers becomes a matter of vital importance.

Not alone should they be able to train their pupils thoroughly in the technique of work and possess some elementary artistic knowledge, but they should follow good business methods in marketing their work. Contracts and orders should be faithfully and punctually fulfilled; otherwise such orders may be sent abroad and thus lost to the country.

It may be pointed out that experience shows that slackness and carelessness in management in this direction result in the failure of the industry.

ORGANISATION. RESERVE FUND.

The financial system now in use in Northern districts, has proved of great service. The payment of ready cash, on the satisfactory completion of work, obviates the danger of workers resorting to local agencies, and places the industry on a steadier basis.

TRAINING.

The Technical School at Enniskillen is now making its influence felt in many Classes where the trained teachers are employed; and the annual Summer Course has also done much towards raising the status of the Industrial Teachers.

Encouraging progress may be reported in many important details, such as improved technique of work, stricter regard to cleanliness, and better methods of book-keeping.

There is also a noticeable improvement in the neatness of some of the class rooms.

Much remains to be done, but the progress already made gives hope for the future.

THE TRAINING OF TEACHERS.

The summer courses of instruction to teachers, held in July and August, provided for instruction in
 SUMMER COURSES, experimental science (physics, chemistry,
 1912. physiology and hygiene, and physical and
 commercial geography), drawing and model-

ling, domestic economy, advanced cookery, manual instruction (woodwork), manual instruction (metalwork), practical mathematics and mechanics, handrailing, office routine and business methods, and rural science (including school gardening). A special course of instruction for teachers of Limerick lace-making, crochet-work, embroidery and sprigging was also held.

The institutions at which the courses were conducted were:—The Royal College of Science, Dublin; the Metropolitan School of Art, Dublin; the Irish Training School of Domestic Economy, Stillorgan, Co. Dublin; the Municipal Technical School and School Garden, Kingstown; the Albert Agricultural College, Glasnevin; and the Crawford Municipal School of Art, Cork.

Special centres were arranged for members of enclosed religious orders, for whom courses of instruction in experimental science, drawing and modelling, and domestic economy were provided.

The courses were attended by 578 teacher-students, of whom 423 made satisfactory attendance and progress. The staff of instructors numbered 85, the following being the staffs engaged for the various courses:—

For Experimental Science:—Professor W. Brown, B.Sc. M.I.E.E.; Professor A. J. Herbertson, M.A.; Professor G. T. Morgan, M.A., D.Sc., F.I.C.; Professor I. Swain, B.A., A.R.C.Sc.I.; Messrs. R. G. Allen, B.Sc., A.R.C.Sc.I.; J. Bayley Butler, M.A., M.B.; H. O. Beckett, M.A.; J. A. Clarke, B.A., M.B.; J. Comerton, B.A.; F. E. W. Hackett, M.A., B.Sc., Ph.D.; T. A. W. Hill, B.Sc.; W. J. Lyons, B.A., A.R.C.Sc. (Lond.); Brice Moore, B.A., LL.B.; A. O'Farrelly, M.A.; J. H. Pollok, D.Sc.; A. Williamson, M.A.; Mrs. M. W. Thompson, M.A.; Misses B. McI. Blair, B.Sc., A.R.C.Sc.I., and N. Sweeney, B.A.; Messrs. J. H. Cousins; W. D. Douglas, A.R.C.Sc.I.; J. C. Elliott, A.R.C.Sc.I.; J. Enright, B.A., B.Sc.; J. Griffiths, B.Sc.; G. Hanlon, M.A., B.Sc.; W. R. Johnston, A.R.C.Sc.I.; A. G. G. Leonard, B.Sc., Ph.D., A.R.C.Sc.I.; R. V. Manning, A.R.C.Sc.I.; H. W. Moss, A.R.C.Sc.I., A.I.C.; H. Norminton, M.Sc.; H. R. Norton, M.Sc.; F. Rawson, A.R.C.Sc. (Lond.); J. Reilly, B.A., A.R.C.Sc.I.; F. W. Warwick, B.A., B.E., A.R.C.Sc.I.; G. A. Watson, A.R.C.Sc.I., F.C.S.; Misses A. Hemphill, A.R.C.Sc.I.; M. C. McDowell, A.R.C.Sc.I.

Drawing and Modelling:—Mr. J. Ward, A.R.C.A. (Lond.); Messrs. H. C. Charde, H. Clarke, H. Houchen, A.R.C.A. (Lond.); F. Luke, A.R.C.A. (Lond.); G. G. Lynes, J. J. O'Brien, W. M. A. Orpen, A.R.A., R.H.A.; O. Sheppard, R.H.A.; J. S. Slator, Mrs. D. Barden, Misses M. Crilley, E. Emerson, A. Jacob, N. M. O'Kelly.

Domestic Economy and Advanced Cookery:—Misses K. Corley, M. J. Harding, E. A. Heptinstall, O. Gentleman, J. F. E. Walsh, B.A.; K. E. Warren.

For Manual Instruction (Woodwork and Metalwork), Hand-railing, and Practical Mathematics and Mechanics:—Messrs. H. O. Armstrong, W. Davidson, J. G. Edwards, A.M.I.M.E.; P. F. Gillies, B.Sc.; W. B. Jamison; G. H. Smith.

For Office Routine and Business Methods:—Messrs. D. J. Coakley, E. Daly, W. Scott.

For Rural Science (including School Gardening):—Professor G. H. Carpenter, B.Sc.; Professor Grenville A. J. Cole, F.C.S.; Messrs. D. Houston, F.L.S.; O. H. Little, M.A., B.Sc., A.R.C.Sc.I.; R. N. Sheridan, A.R.C.Sc.I.; G. O. Sherrard, A.R.C.Sc.I.; E. Turner, A.R.C.Sc.I.; R. L. Valentine, A.R.C.Sc.I.; Misses H. Laird, B.A., and M. C. McDowell, A.R.C.Sc.I.

For Limerick Lacemaking, Crochet Work, Embroidery, and Sprigging:—Mr. W. A. Mulligan, A.R.C.A. (Lond.); Mrs. A.

Allan, Mrs. K. Breton, Misses A. McMenamin, M. Maguire, M. O'Neill, E. Percival, S. A. Reynolds.

The number of teachers admitted to the courses in the various subjects, and the number who made satisfactory attendance and progress are shewn in the following table:—

	Number of Teachers who attended the Courses.	Number of Teachers who made satisfac- tory attendance and progress
First Year Syllabus of the Preliminary Course of Experimental Science . . .	79	23
Second Year Syllabus of the Preliminary Course of Experimental Science . . .	17	12
Special Course in Physics (Third Year Syllabus) . . .	11	5
Special Course in Physics (Fourth Year Syllabus.—Course B.) . . .	15	5
Special Course in Chemistry (Third Year Syllabus) . . .	32	18
Special Course in Chemistry (Fourth Year Syllabus) . . .	35	23
Special Course in Physiology and Hygiene (Third Year Syllabus) . . .	11	9
Special Course in Physiology and Hygiene (Fourth Year Syllabus) . . .	7	7
Special Course in Physical and Commercial Geography (Third Year Syllabus) . . .	36	29
Special Course in Physical and Commercial Geography (Fourth Year Syllabus) . . .	19	17
Rural Science, including School Gardening (First Year Syllabus) . . .	29	26
Rural Science, including School Gardening (Second Year Syllabus) . . .	24	21
Domestic Economy . . .	31	22
Manual Training (Woodwork) . . .	19	10
Manual Training (Metalwork) . . .	10	9
Advanced Cookery . . .	14	13
Office Routine and Business Methods (First Year Course) . . .	14	13
Office Routine and Business Methods (Second Year Course) . . .	6	4
Drawing and Modelling . . .	99	96
Practical Mathematics and Mechanics . . .	21	13
Handrailing . . .	10	9
Limerick Lace Making, Crochet Work, Embroidery and Sprigging . . .	39	39
Totals . . .	578	423

Provision is made at the Royal College of Science for the training of teachers of Experimental Science, a special group of subjects being arranged for those who wish to take up this branch of the teaching profession. Teacherships-in-training, tenable at the Royal College of Science and the Metropolitan School of Art, are offered for

competition amongst science and art students. Particulars of the competitions will be found at pages [168] and [170].

The Department have made provision for a supply of teachers of commercial subjects who will be capable of giving instruction in some of the higher branches. Four scholarships were awarded in 1904, two in 1905, six in 1906, three in 1907, eight in 1910, and five in 1912.

Twenty-one scholars have completed a two years' course of training at the London School of Economics and Political Science (University of London), and have been engaged in teaching in the country under the Department's schemes: of these, however, six are now otherwise employed. Six scholars are at present attending the London School of Economics, whilst one Scholar has deferred taking up the Scholarship awarded to him until the Session 1913-14.

In order to provide for the further training of Manual Instructors, otherwise than by means of Summer Courses, facilities have been offered to enable Instructors to attend special Saturday Classes at convenient centres.

A class in Practical Mathematics was held during the past session at the Municipal Technical Institute, Belfast, and was attended by ten Instructors, and classes in Practical Mathematics and Applied Mechanics were held at the Crawford Municipal Technical Institute, Cork, being attended by seven Instructors.

The training of teachers of Domestic Economy subjects is carried on at the Irish Training School of Domestic Economy, St. Kevin's Park, Kilmacud, Stillorgan, Co. Dublin. The

course of training extends over two years, but only those students are selected therefor who have most satisfactorily followed the course in Household Management, which extends over one year.

A report of the School for the session is printed at page 141 from which it will be seen that, during the session, seven students secured the Department's Diploma as Domestic Economy Instructresses.

Classes for the training of National School Teachers in ELEMENTARY EXPERIMENTAL SCIENCE were

conducted in the Technical Schools at Ballymena, Belfast, Dungannon, Galway, Kilkenny, Kingstown, Nenagh, Omagh, Sligo, and Templemore.

The following table shows the number of such classes which have been held, and the number of teacher-students examined :—

SESSION.	No. of Centres.	No. of Teachers presented for examination.	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course. (Rural Economy).	Total.
1903-4, .	7	53	31	—	—	31
1904-5, .	5	32	22	—	—	22
1905-6, .	7	93	40	15	—	55
1906-7, .	9	110	31	39	—	70
1907-8, .	13	124	17	65	—	82
1908-9, .	11	113	19	42	6	67
1909-10 .	10	88	21	41	7	69
1910-11 .	10	54	11	10	18	39
1911-12 .	10	59	21	2	15	38

Special Summer Courses in RURAL SCIENCE (INCLUDING SCHOOL GARDENING) were held by the Department during the month of August. Fifty-three National School Teachers were admitted to these courses, of whom forty-seven received certificates of satisfactory attendance and progress. Four classes in this subject were also held during the session at Athy, Naas (2), and Tullow. These classes were attended by forty-nine teachers. Only one class completed the course of instruction by the end of the session. Certificates of satisfactory attendance and progress were obtained by twelve of the fifteen teachers attending this class.

Classes for the training of National School Teachers in DOMESTIC ECONOMY were held in the following Technical Schools: Ballymena, Ballymoney, Banbridge, Belfast, Carlow, Coleraine, Dundalk, Enniskillen, Galway, Kingstown, Larne, Limerick, Londonderry, Lurgan, Magherafelt, Omagh, Portadown, Sligo, Templemore, Tralee, Tullow and Waterford.

The following table shows the number of such classes which have been held, and the number of teacher-students examined :—

[TABLE

SESSION.	No. of Centres.	No. of Teachers presented for examination.	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course.	Total.
1908-9, .	1	12	12	—	—	12
1909-10, .	18	422	362	5	—	367
1910-11, .	21	351	131	109	5	245
1911-12, .	22	294	91	62	26	179

Special DRAWING Classes, for National School Teachers, were conducted in the Technical Schools in Dundalk, Galway, Limerick, Newry, Portadown, Sligo, and Tralee.

The following table shows the number of such classes which have been held, and the number of teacher-students examined:—

SESSION.	No. of Centres.	No. of Teachers presented for examination	No. of Teachers who received Certificates of satisfactory attendance and progress.		
			First Year Course.	Second Year Course.	Total.
1909-10, .	3	7	1	—	1
1910-11, .	7	92	53	—	53
1911-12, .	7	72	33	18	51

CENTRAL INSTITUTIONS.

The Reports of the Council and the Registrar of the ROYAL COLLEGE OF SCIENCE AND METROPOLITAN SCHOOL OF ART. Royal College of Science will be found at page [235] of the Appendices, and the Report of the Head Master of the Metropolitan School of Art at page [249]. (See also pages 12 and 16 of this Report).

The School re-opened on the 8th August with twenty-nine students. Of these (see also pages 12-16 of this Report) thirteen were students whose names remained on the School Roll at the close of the previous session. The remaining sixteen were new students admitted to the Household Management

IRISH
TRAINING SCHOOL
OF DOMESTIC
ECONOMY.

Course. Seven of these were admitted without examination, having passed in the Senior Grade in the Intermediate Examinations, the other nine being admitted upon the result of the entrance examination held on the 6th June, 1911. One of the Household Management students withdrew from the School during the session.

At the close of the session, certificates were awarded to the fifteen students who had completed the Household Management Course and six of them were selected for training as teachers.

Of the thirteen teachers-in-training who attended the School during the session, seven secured the School Diploma, and six remained on the School Roll at the close of the session.

The following classes for extern students were held during the session, in order, primarily, to provide facilities for teaching practice by the teachers-in-training:—

Children's Class in Cookery	attended by 12 students.
" " " Laundrywork	" " 14 "
" " " Housewifery	" " 21 "
" " " Home Sewing	" " 12 "

These Classes were attended by 32 individual students.

Forty-five pupils attended the Killarney School of Housewifery during the Academic Year 1911-12.

KILLARNEY	Of these, one went to the Munster Dairy
SCHOOL OF	Institute, one went to America, and twelve
HOUSEWIFERY.	remained on the school books at the close
	of the session, not having completed their

training. Situations, with wages ranging from £14 to £18 per annum were secured for twenty of the pupils who completed the course, the other eleven electing to return to their homes.

SCHOLARSHIPS.

The following Scholarships were awarded during the year:—

- (1.) Scholarships for Boys.
- (2.) Scholarships at Residential Schools of Domestic Training.
- (3.) Local Exhibitions.
- (4.) Science and Technological Scholarships and Teacherships-in-Training at the Royal College of Science (Senior Science Scholarships).
- (5.) Teacherships-in-Training at the Metropolitan School of Art (Senior Art Scholarships).
- (6.) Industrial Scholarships.
- (7.) Commercial Scholarships.
- (8.) Crochet-work and Sprigging Scholarships.

An examination in connection with the revised scheme of Scholarships for Boys (see Tenth Annual Report, page 90, and Appendices of the present Report, page [147]), was held on the 20th June, 1912, and was attended by 141 candidates. As a result of the examination, twenty Technical and two Apprenticeship Scholarships were awarded.

Of the Scholarships held under the conditions of the old scheme during the session 1911-12, fourteen were renewed for a third year, and one was renewed for a fourth year as an Apprenticeship Scholarship.

Of the thirty Technical Scholarships awarded in 1911, twenty six have been renewed for a second year as Technical Scholarships, and two of the Scholars, having attained the qualifying age, have been awarded Apprenticeship Scholarships. Of the remaining two Scholarships one has been surrendered, and the other has not been renewed.

One of the holders of the eight Apprenticeship Scholarships awarded in 1911 has surrendered his Scholarship, and a second Scholarship has been withdrawn.

The following table shows the number of Scholarships, awarded by the various Committees, at present being held:—

COMMITTEE.	New Scheme.			Old Scheme.		Total.
	Technical Scholarships.		Apprenticeship Scholarships.	Third Year.	Fourth Year. (Apprenticeship Scholarship).	
	First Year.	Second Year.				
Co. Clare,	2	—	—	—	—	2
Co. Down,	8	1	1	—	—	10
Co. Galway,	2	9	1	4	—	16
Co. Leitrim,	1	—	—	—	—	1
Co. Limerick,	—	—	4	—	—	4
Co. Longford,	3	2	—	—	—	5
Co. Mayo,	—	—	1	—	—	1
Queen's County,	—	—	—	8	—	8
Co. Sligo,	2	2	—	—	—	4
Tipperary (Urban and Rural Districts),	—	—	3	1	—	4
Co. Tipperary (North Riding),	—	1	—	1	—	2
Co. Tipperary (South Riding),	—	10	—	—	—	10
Co. Waterford,	2	1	—	—	1	4
TOTALS	20	26	10	14	1	71

In addition to the Scholarships awarded under the Scheme mentioned above, 346 Scholarships were awarded in 1912 by the Managers of Day Trades Preparatory Schools. These Scholarships, as a rule, cover only tuition, or tuition and the necessary books and instruments, but 63 Scholars received, in addition, sums varying from £1 to £10 as maintenance allowance or as grants towards the cost of travelling.

These Scholarships are in some cases renewed from year to year if the progress made by the Scholar is satisfactory. In other cases Scholarships, other than First Year Scholarships, are awarded to the pupils generally upon the results of the work of the previous session.

School	1st Year Scho- lars	2nd Year Scho- lars	3rd Year Scho- lars	4th Year Scho- lars	Totals
Ballymena Day Trades Preparatory Schools	7	8	1	—	16
Belfast Christian Brothers' Day Trades Preparatory School	18	24	16	—	58
Belfast Municipal Day Trades Preparatory School	19	33	5	—	57
Blackrock Day Trades Preparatory School	9	8	3	—	20
Clonmel Day Trades Preparatory School	19	6	1	—	26
Cork Christian Brothers' Day Trades Preparatory School	10	6	—	—	16
Kilkenny Day Trades Preparatory School	11	4	—	2	17
Londonderry Day Trades Preparatory School	8	5	—	—	13
Portadown Day Trades Preparatory School	11	8	—	—	19
Queenstown Day Trades Preparatory School	3	2	—	—	5
Ringsend: Pembroke Day Trades Preparatory School	28	27	13	—	68
Sligo Day Trades Preparatory School	5	2	—	—	7
Waterford Day Trades Preparatory School	15	9	—	—	24
TOTALS	163	142	39	2	346

Scholarships at Residential Schools of Domestic Training, of the value of £15 each, are awarded to a limited number of girls to enable them to attend for one year a regular course of instruction and training in Domestic Economy, such as will cultivate their intelligence and resourcefulness and render them more practical in the performance of home duties. The Scholarship, together with the payment of a fee of £2 on the part of the scholar, entitles the holder to board, residence, and instruction during the term of the Scholarship. Further particulars of the conditions under which the Scholarships are awarded, and the course of instruction which the scholars undergo, are set forth in the County Scholarship Scheme at page [151] of the Appendices.

The number of Scholarships awarded in 1912 by each Committee adopting the scheme was as follows:—

County Carlow, 10; County Clare, 6; Queen's County, 12; Tipperary Urban and Rural Districts, 2; County Tipperary (South Riding), 7; County Waterford, 1; County Westmeath, 14; County Wexford, 7.

The scholars are distributed between the various approved Residential Schools of Domestic Training as follows:—

Carriek-on-Suir: Convent of Mercy	..	8
Dublin: Domestic Training Institute	..	2
Dundrum: Presentation Convent	..	6
Kilmore: Convent of St. John of God	..	11
Moate: Convent of Mercy	.. ..	14
Stradbally: Presentation Convent	..	18

Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved

by the Department, one or more Exhibitions of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art School, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age; they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them

to take full advantage of the course of instruction selected at the approved day school of higher education. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their studies.

Four Exhibitions were granted on the results of the examinations held in 1912, one Art and one Engineering Exhibition being awarded to students of the Municipal Technical Institute, Belfast, and two Art Exhibitions to students of the Crawford Municipal School of Art, Cork. The Commercial Exhibition awarded to a student of the Limerick Municipal Technical Institute in 1911 and the Science Exhibition awarded to a student of the Waterford Central Technical Institute, were renewed for a second session.

At the Examination for Science and Technological Scholarships and Teacherships-in-Training, held in 1912, thirty candidates competed for the five Scholarships and five Teacherships, offered for competition by the Department, and tenable at the Royal College of Science.

The conditions attached to these Scholarships and Teacherships-in-Training are given on Form S. 33, printed in the Appendices, page [170].

The three Teacherships-in-Training at the Metropolitan School of Art, awarded in 1911, were renewed for a second year, and consequently, as there were no vacancies to fill, a competition was not held in 1912.

The conditions under which Teacherships-in-Training are offered for competition in 1913 are given in Form S. 2, printed in the Appendices, page [168].

Industrial Scholarships are of the value of £80 each and are renewable for a second and third year at the discretion of the Department. The object of these Scholarships is to enable selected persons (who must already have been engaged in one of the higher branches of an industry) to take such a course of instruction in that industry, in an Institution providing special advanced courses, as will enable them to undertake the management of an industry in Ireland at the termination of their instruction.

No new Scholarships were offered for competition in 1912, but two Scholarships, one in Woollen Manufacture and one in Linen Manufacture, awarded in 1910, and continued in 1911, were renewed for a third year.

The Scholarship in Woollen Manufacture is being held at the University of Leeds, the Scholarship in Linen Manufacture at the Municipal School of Technology, Manchester.

The conditions under which these Scholarships were awarded

are given in Form S. 190, printed in the Appendices, page [172]:—

Commercial Scholarships are of the value of £100 each per annum, and are tenable for two years.
 COMMERCIAL The object of the Scholarships is to enable
 SCHOLARSHIPS. selected persons to obtain such a training as will enable them to undertake the teaching of higher commercial subjects in Ireland.

The holders of two of the eight Scholarships awarded in 1910 were temporarily engaged during the session 1911-12 in teaching in Ireland, and their Scholarships have been renewed for the session 1912-13. Five new Scholarships were awarded in 1912.

The conditions under which the Scholarships were awarded are given in Form S. 194, printed in the Appendices, page [172].

The Department offered for competition in 1912 three Scholarships tenable at the Training School for
 CROCHET-WORK Lace and Sprigging Teachers, Enniskillen.
 AND SPRIGGING The object of the Scholarships is to enable
 SCHOLARSHIPS. selected applicants, who must have had a satisfactory general education, to secure training as teachers of the subjects mentioned.

One Scholarship in Crochet-work and two in Sprigging were awarded on the results of examinations held in Dublin and Enniskillen. Further particulars respecting these Scholarships are given at page [173] of the Appendices.

The list of candidates awarded Science and Technological Scholarships and Teacherships-in-Training, Commercial Scholarships and Crochet-work and Sprigging Scholarships in 1912, will be found in the Appendices, page [174].

3.—FISHERIES.

The Report of the Fisheries Branch for the year 1911 was issued since the date of the Department's last General Report.

The Sea Fisheries were only slightly less productive than those of last year, which was a good one.
 SEA FISHERIES. Excluding salmon, the value of the capture at places of landing is estimated at £374,085. The figures do not include the product of the whaling industry which was carried on from the two stations (Inishkea and Blacksod), the total output of which consisted of 4,377 barrels of oil, 13 tons of whalebone, and 270 tons and 2,446 bags of manure.

Little improvement in the mackerel fisheries is apparent, but prices for cured mackerel show an upgrade movement; those for the fresh fish still, however, keep so low as to tend to make mackerel fishing less attractive than heretofore to our fishermen.

The Department have established a mackerel curing station at Courtmacsherry, in order to see whether MACKEREL CURING. by the adoption of a better system of curing, enhanced prices can be obtained. Owing to the decline in the general take of fish the output from the station was less than was anticipated, but it may be stated that the experiment showed that an increase in price was possible.

The herring fisheries are coming more into prominence and are absorbing in a larger measure the attention of Irish fishermen. The total amount of herring landed during the year under review was considerably in excess of that of the previous year, and its value was estimated at £166,544.

The value of the kelp export from the Counties of Clare, KELP. Galway, Mayo, Sligo, Donegal and Antrim, during the year is estimated at £16,600.

The experiment to test the value of an Irish Crown Brand for cured herrings was continued during GOVERNMENT BRAND FOR CURED HERRINGS. the year at the ports of Ardglass and Kilkeel. The Brand was applied to nearly 5,000 barrels. The fish were sold at satisfactory prices, and the information which was received from the Continent indicated that a favourable opinion of the article has been, in general, formed amongst buyers.

The number of Irish vessels actually engaged in fishing during the year (some wholly, and some partially)—irrespective of those following VESSELS AND MEN ENGAGED. salmon fishing—was 5,515. The numbers of men and boys employed were respectively 19,789 and 309.

Fourteen fishermen lost their lives during the year ended 30th September, 1911, while actually CASUALTIES. engaged in the pursuit of their calling, and three were drowned while engaged in work not immediately connected with fishing.

The Department pursued their course of developing motor boat fishing, and also made a limited experiment in the direction of providing LOANS. steam drifters to Irish fishermen. The total of the loans made up to the present in connection with these two classes of vessel amounted to over £28,600 0s. 0d. The actual sum which it was arranged to advance by way of loan during the year ended 31st March, 1912, in regard to all classes of fishing vessels and fishing gear amounted to £12,552 10s. 0d.

Experiments in the marketing of oysters were carried out on a considerable scale by the Department, and there is reason to believe that a general increase in demand for oysters from the beds on the west coast of Ireland has been the result.

OYSTERS.

The fact that some cases of typhoid which occurred in England were attributed to the eating of mussels has operated adversely on the mussel export from this country, but the Department have been and are taking all steps possible to secure that the effect on the sale of mussels from unpolluted sources shall be as slight as possible.

MUSSELS.

Assistance in the development of the sale of fish in Irish towns has been continued by the Department, and greater activity and improvement in business methods have been apparent. Through and Special Rates for the carriage of fish have been secured.

SALE OF FISH IN
INLAND TOWNS.

The Department afforded instruction in net-mending at Kinsale, Arklow and Howth.

NET-MENDING.

Prosecutions were instituted in five cases of illegal trawling, four of them being by steam vessels.

Twenty foreign steam vessels were also reported to the Customs Authorities under the provisions of the Trawling in Prohibited Areas Prevention Act, for working in the extra-territorial parts of areas off the Irish coast in which steam trawling is prohibited.

MARINE

SUPERINTENDENCE.

The skipper of a British steam trawler was convicted of a breach of the Regulations for preventing collisions at sea.

The Department's application to the Development Commissioners resulted in a recommendation by the latter that a sum of £50,000 should be devoted to the development of fisheries and the improvement of harbour accommodation, etc. A grant of £4,245 was also made to enable the Department to procure additional dredging plant.

DEVELOPMENT
GRANT.

The Department's dredging plant has been employed during the year at Balbriggan, Arklow, Courtown, Buncrana and Portrush. The channel of the River Slaney up to Enniscorthy was improved by the use of a small dredger specially chartered for the purpose.

PIERS AND
HARBOURS.

The pier at Ballaghahine, County Clare, has been practically completed. The work of improving Buncrana Harbour was con-

tinued. A boat-slip was constructed in the dock at Ballintoy. The construction of a pier at Church Bay, Rathlin, has been begun.

The periodic observations on the physical conditions of the waters round Ireland were carried out as usual during the year.

FISHERY INVESTIGATION. The investigation of the marine fauna of the Irish Coast was continued, the results being published from time to time in the Scientific Investigations of the Fisheries Branch. Special attention was paid to the fauna and flora of Blacksod Bay with a view to ascertaining what, if any, changes might be caused by the establishment there of a whaling station.

These fisheries were considered to have afforded a greater total yield than during the preceding year, and, with one exception, greater than during any other of the past eight years. The take at sea by drift nets off the west and north coasts showed an important increase. The great decline in the migration of grilse is a matter that causes anxiety. No serious case of disease was reported. The output of salmon fry from hatcheries was larger than in the previous season, and consisted of 9,175,000. That of white and brown trout reached totals of 162,000 and 1,279,700, respectively.

The Department rendered financial assistance to local Boards of Fishery Conservators and Fishery Protection Associations, on certain conditions, to the following extent:—

Dublin Board of Conservators	..	£10	16	0
Waterford	..	210	0	0
Cork	..	600	0	0
Bandon	..	30	0	0
Skibbereen	..	35	0	0
Kenmare	..	80	0	0
Waterville	..	50	0	0
Killarney	..	200	0	0
Limerick	..	362	14	6
Galway	..	50	0	0
„ (towards cost of staunching				
„ swallow holes” in Clare-				
galway River)	..	50	0	0
Bangor Board of Conservators	..	15	0	0
Ballina	..	250	0	0
Sligo	..	20	0	0
Ballyshannon	..	100	0	0
Londonderry	..	100	0	0
Coleraine	..	100	0	0
Lough Derg Fishery Society	..	50	0	0
Westmeath Lakes Fish Preservation				
Society	..	20	0	0

Lough Sheelin Trout Protection Association	£30 0 0
Protection of Rivers in Boyle District	20 0 0
Lough Mask and Carra Fishery Society	15 0 0
Lough Corrib Association	25 0 0
Loughs Conn and Cullen Fisheries Association	25 0 0
Lough Arrow Fish Preservation Society	15 0 0

4.—STATISTICS AND INTELLIGENCE.

The work of this Branch falls under four main heads:—

- (1.) The collection and publication of agricultural, trade, and other economic statistics relating to Ireland;
- (2.) The collection of information both at home and abroad on questions submitted to the Department and affecting its work;
- (3.) The editing of the Quarterly JOURNAL of the Department and press-editing of other publications issued by the Department;
- (4.) The supervision of the Department's printing and publishing work. The distribution and despatch of reports, leaflets, and the numerous other Departmental publications.

STATISTICAL SECTION.

This section has three main divisions—the Agricultural Statistics of Ireland, the Statistics of Irish Imports and Exports, and the Statistics of Prices of Irish Agricultural Products.

The Agricultural Statistics of Ireland include the statistics of the division of land, of the number and size of agricultural holdings and of their distribution, of the area and produce of crops and the numbers and classes of live stock, of the extent and kinds of woods and plantations and of planting and felling operations, and also of the supply and migration of agricultural labour and the wages of the same. Special statistics are also collected showing the area under the different classes of fruit; the extent under the several varieties of potatoes; the different breeds of live stock; the mortality of live stock; the extent of bee-keeping; the number and production of creameries, butter factories, corn mills, scutch mills, malt houses; and the numbers of the chief classes of farm machinery.

The statistics of the division of land and the number and classes of live stock, together with many of the special statistics, are collected annually in June. The preliminary results of the

enumeration showing the changes in the area of crops and the numbers of live stock are published in August or September.

Reports providing preliminary information regarding the state and the prospects of the several crops are published at intervals during the summer and autumn. The next step is the collection of particulars of the yield of these crops. Returns of the yield of hay are collected at the end of August, those of grain crops and potatoes at the end of October or early in November, and those of the root crops and flax at the beginning of December. As soon as the information thus collected has been examined and compiled, it is issued in a series of bulletins—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Roots, and (5) Flax. This method of division enables the information regarding the several crops to be made known at as early a date as possible. Care is taken not to collect this final statistical information regarding each crop until almost the whole has been saved, as otherwise an erroneous estimate might be formed.

Finally, in the volume of Detailed Agricultural Statistics which is issued later, full and revised tables are furnished showing, as compared with previous years, the area and produce of crops and the numbers of live stock. In this volume are also contained particulars of the acreage of agricultural holdings; statistics of forestry; and various other statistics relating to varieties of fruit, live stock, scuteh mills, etc.

A separate report is issued annually on the subject of Irish Agricultural Labour. This report deals not only with the annual migration of agricultural labourers to England and Scotland, but also with the supply of agricultural labour in Ireland, and with the wages earned by Irish agricultural labourers respectively in Ireland and Great Britain.

In October, 1912, the Department published a Report and Tables regarding the Agricultural Output of Ireland in the year 1908. These were compiled as the result of an investigation conducted by the Statistics and Intelligence Branch in accordance with a request made by the Board of Trade in connection with the Census of Production Act, 1906. This Report is the first of its kind published for Ireland, and the compilation of it presented considerable difficulties; but the results as shown in the Report fully justified the labour expended on it as similar information was not previously available. The second Report of this series will deal with the Agricultural Production of Ireland during the twelve months from 1st June, 1912, to 31st May, 1913, and investigations are at present being conducted in connection with the matter by the Statistics and Intelligence Branch.

The report on Irish Import and Export Statistics published during the year was that for the year 1911.

TRADE STATISTICS. The returns are in some respects still unsatisfactory. As has been pointed out in

these Reports from time to time the returns relating to manufactured imports and exports are at present open to errors, which, under existing conditions, cannot be safeguarded against, and, until adequate statutory powers are provided, it will be impossible to secure returns which are fully complete, reliable, and up-to-date.

Annual reports are issued dealing with the prices of Irish live stock and agricultural produce. Arrangements have been made for a considerable extension of the number of reports received of prices of live stock at markets and fairs, and the establishment of a system of reporting prices of agricultural produce sold in the principal market towns will, it is expected, shortly be made.

Two half-yearly reports are also issued by the Department on the Banking, Railway, and Shipping Statistics of Ireland.

Statistical leaflets are issued to the "Press," public and private companies and private individuals, showing :—

- (1.) Exports of animals. These are issued weekly, monthly, and yearly.
- (2.) Prices of live stock at the principal Irish markets and fairs. These are issued daily.
- (3.) The number of pigs killed or bought dead by Irish bacon curers. These are issued weekly.

Enquiries are constantly being received for statistical information from Government departments, public institutions, and private individuals in these and foreign countries and in the Colonies. This involves the compilation of a large number of special statistical tables each year.

The following statistical reports have been issued since the last Annual Report :—

- (1.) Detailed Agricultural Statistics of Ireland for the year 1911. Cd. 6377-1912.
- (2.) General Abstracts of the Acreage under Crops and Numbers and Descriptions of Live Stock in 1912. Cd. 6375-1912.
- (3.) Abstracts of the Average Yield and Total Produce of the following Crops in 1912 :—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Root Crops, (5) Flax.
- (4.) Report and Tables Relating to Irish Agricultural Labourers in 1911. Cd. 6198-1912.
- (5.) Report on Imports and Exports at Irish Ports in 1911. Cd. 6397-1912.
- (6.) Return of Prices of Crops, Live Stock, and other Irish Agricultural Produce, 1911. Cd. 6206-1912.
- (7.) Two half-yearly Reports on Banking, Railway, and Shipping Statistics in Ireland. Cd. 6214-1912; and Cd. 6417-1912.
- (8.) The Agricultural Output of Ireland for the year 1908.

INTELLIGENCE SECTION.

During the year information showing the condition and progress of the crops was obtained from
CROP REPORTS. time to time from correspondents in the several counties, and five crop reports and two fruit crop reports, based on the information thus supplied were issued during the course of the summer and autumn. During July and August special weekly reports also were received from each constabulary district giving particulars of the nature and progress of the potato blight, and stating the extent to which spraying operations were being carried out.

The collection of information by means of egg records has been continued during the past year, and
SPECIAL INQUIRIES. regular monthly returns have been received from about 170 correspondents. These records have proved of great interest and importance as showing in a concrete way the use of statistical method in farm work. A further development of the work has now taken place. Hitherto the records have been of flocks or pens, but a series of records, dealing with individual hens by means of the trap-nesting system, has been established. The keeping of records, whether in milk or egg production, is a matter of the greatest importance, as it is only by means of the records that reliable comparisons can be made, and that flocks and herds can be properly weeded of the least profitable stock. At the same time only by such continuous records and observation can the transmission of producing power be ascertained in a reliable manner. It is important, therefore, that this part of the work should be further developed, and that also in other branches of farm management more systematic information should be obtained as to actual costs of production on typical farms in Ireland. There is a great field for the useful development of statistical records and exact method of accounts as applied to farm work.

Among other inquiries special reference may be made to that on the organisation of the dead meat trade. Several reports on this subject were published in the Department's JOURNAL, and further inquiries are being carried on.

The list of the principal Irish Exporting Manufacturers is still being issued at home and abroad, and every effort is being made to bring it under the notice of all likely to help in any way Irish industries and Irish industrial and commercial expansion. Inquiries are frequently received from foreign countries for the names of firms of Irish Producers, and it is hoped that this publication will greatly assist in making known the names of Irish firms and the merits of Irish goods.

Two special monographs, "Land Purchase in Ireland" and "Some Forms of Rural Credit in Ireland," were prepared for the International Institute of Agriculture, Rome, and were published in the Journal of the Institute.

The publication of the Quarterly JOURNAL has been continued as heretofore. Several contributions of special practical importance have been re-issued in the form of leaflets or pamphlets, including :—

- “ JOURNAL,”
LEAFLETS, ETC.
- A Decade of Technical Instruction in Ireland.
 - Catch Crops.
 - Development of Poultry Instruction in Ireland.
 - Foot Rot in Sheep.
 - Investigations on Potato Diseases: Third Report.
 - Milk Records.
 - Preliminary Note on an Experiment in Curing Mackerel for the American Market.
 - Shorthorn Herds in Ireland, 1911.
 - Sugar Beet Experiments, 1911.
 - Technical Instruction in Cork.
 - “ “ “ Larne.
 - “ “ “ Limerick.
 - Tests with four Nitrogenous Manures.
 - The Dead Meat Trade.
 - The Preparation and Packing of Table Poultry for Market.
 - The Use and Purchase of Feeding Stuffs.
 - Tobacco Growing Experiments, 1911.
 - “ Leaflet J., Grading, Packing and Maturing.
 - “ “ K., Marketing.
 - Tuberculosis in Animals.
 - Winter Dairying and Creameries.

The following Departmental Publications have been issued during the year and are on sale to the public :—

- Conference on the Poultry Industry, Dublin, May, 1911
Report of Proceedings.
- Cookery Notes for use in Schools and Classes for Girls
Working under the Department's Schemes: Third
Issue.
- Geological Memoir on the Interbasaltic Rocks (Iron Ores
and Bauxites) of North-East Ireland.
- Instruction in Bee-keeping for use of Irish Bee-keepers.
New and Revised Edition.
- Report of the Departmental Committee on Irish Inland
Fisheries.

Eight leaflets were re-issued in a revised form, viz. :—Results of Field Experiments in Barley, Meadow Hay, Potatoes, Mangels, Oats, Turnips, Flax and Wheat.

The special issue of leaflet No. 14 (Prevention of Potato Blight) to National Schools, etc., in Ireland, was repeated.

The total number of separate leaflets issued during the year amounted to, approximately, 942,000.

There has been a steady increase in correspondence with foreign countries and in the information furnished to the Department as regards agricultural development abroad. The great increase in agricultural research work as well as in the methods of organisation for the protection and development of agriculture in the different countries is a matter which requires the closest observation. No country can afford to ignore the steps which other countries are taking, or to neglect to compare results. The Department are now in regular communication with the International Institute of Agriculture, Rome, Agricultural and Statistical Departments of the Colonies and the Chief Foreign Countries, and receive an exchange of publications which may be consulted in the Departmental Library. In addition, a large number of foreign agricultural publications of a non-official character are received and their contents indexed for the use of inquirers, and a monthly list of accessions to the Library is prepared and circulated.

PUBLICATIONS, DESPATCH, ETC., SECTION.

The work of this Section was of the usual miscellaneous and detailed nature, and consisted principally of the supervision of the Department's printing and publishing work; taking charge of the Department's advertising business; obtaining from H.M. Stationery Office, other Government Departments, firms, and individuals, the supplies of published books, blue books, maps, etc., required for the Department's work; and the distribution and despatch of Leaflets, Schemes, Quarterly JOURNAL, Annual General and other Annual Reports, Fair Reports, Crop Reports, etc., to the persons whose names appear on the Department's mailing lists, and to many other correspondents.

In connection with the inquiries, statistical and other, carried on by this Branch, the Department have to acknowledge the great assistance received from the Inspector-General of the Royal Irish Constabulary, the Chief Commissioner of the Dublin Metropolitan Police, the Registrar-General for Ireland, the Managers of the Irish Banks, the Irish Railway Companies, the Irish Port and Harbour Authorities, and also from a large number of correspondents who have furnished information on agricultural and other questions.

5.—VETERINARY.

The Veterinary Branch deals with the work of the Department as the Central Authority in Ireland under the Diseases of Animals Acts. As a separate report of the proceedings under those Acts is issued for each calendar year, it will be sufficient here to refer briefly to some matters relating to the diseases which engaged attention.

The long period of immunity from Foot and Mouth Disease which Ireland enjoyed for over twenty-eight years was unexpectedly interrupted by the re-appearance of the disease in June 1912. On the 30th of that month twenty-four cattle were found to be affected on a farm at Swords, County Dublin. The existence of the disease was ascertained in the following circumstances:—On the 27th June, lesions of the disease were found in some cattle in the Liverpool abattoir. These cattle were exposed in the Stanley Market, Liverpool, on 24th June, having been landed from Dublin on the previous day by a dealer. The names and addresses of the persons from whom this dealer purchased the consignments of cattle which he had brought to Liverpool were obtained, and the farms from which the animals had been moved were visited by Veterinary Inspectors of the Department, with the result that the disease was discovered at Swords.

An Order was at once made prohibiting the movement of cattle, sheep, goats and swine in a very extensive area, and the infected animals and those in contact therewith or exposed to infection were promptly slaughtered. The disease, however, appeared on other farms in the locality, and between 30th June and 14th August, 17 outbreaks occurred in the Swords district.

The number of animals slaughtered in connection with these 17 outbreaks was 1,928, viz., 1,006 cattle, 881 sheep, 26 swine, and 15 goats.

It was hoped that the drastic action taken would have been successful in confining the disease to the immediate neighbourhood of Swords, but between the 13th and 16th August 3 fresh outbreaks were confirmed in County Meath and 1 in County Louth. On 27th August the disease appeared in County Kildare. Three outbreaks occurred in that county, the latest on 16th September. Two outbreaks were also confirmed in County Wicklow on 5th September and 1st October. In connection with these 9 outbreaks the Department caused the slaughter of 722 animals, viz.:—370 cattle, 328 sheep, and 24 swine.

On 27th August a case of the disease was confirmed in County Fermanagh; and four further outbreaks occurred in that county between that date and the 5th October. The number of animals slaughtered in consequence of these five outbreaks was 111, viz.:—71 cattle, 34 sheep, and 6 goats.

On 18th October serious outbreaks of the disease were confirmed at Mullingar, County Westmeath. The animals affected in the first instance were for the most part milch cows, which belonged to residents in the town, and which were moved daily to and from grazing lands in the vicinity. Between the 18th October and 7th November the disease appeared on 37 different places in or near the town. In connection with these outbreaks 770 animals were slaughtered as diseased or exposed to infection, viz. :—427 cattle, 315 sheep, 19 swine, and 9 goats.

Some statistics relating to the disease from 30th June to 7th November, inclusive, are subjoined :—

County	OUTBREAKS			Animals affected
	First	Last	Total	
Dublin, .	June 30	August 14	17	209 (208 cattle, 1 sheep)
Meath .	August 13	August 16	3	6 (all cattle)
Louth, .	August 15		1	1 (cow)
Kildare, .	August 27	September 16	3	35 (21 cattle, 14 swine)
Fermanagh	August 27	October 5	5	14 (all cattle)
Wicklow, .	September 5	October 1	2	2 (all cattle)
Westmeath	October 18	November 7	37	113 (112 cattle, 1 pig)
			68	380

The origin of the first cases at Swords has been the subject of many surmises, but has not been definitely ascertained.

A number of restrictive Orders were made by the Department, the principal of which were Orders prohibiting—

- (1) the movement of animals in wide areas round infected centres ;
- (2) the importation of ruminant animals and swine from Great Britain ;
- (3) the importation of hay and straw for use as fodder or litter for animals.

In consequence of the restrictions in force it became necessary at an early stage to take special steps to maintain the meat and milk supplies of the Dublin Metropolitan District. For these purposes the Department made arrangements for the movement under licence, and subject to veterinary examination, of fat stock from certain areas for slaughter in the Dublin abattoir and in approved slaughterhouses, and also for the movement on similar conditions as regards licensing and inspection, of milch cows to replenish dairy herds.

The Department were in a position to remove as from 7th October all restrictions placed upon movement of animals in

the Counties of Dublin, Meath, and Louth, except from some small areas round places on which disease had appeared. These areas were declared free as from 23rd October. The restrictions imposed in the Counties of Kildare and Wicklow were, for the most part, removed as from the 18th November, and those in County Fermanagh as from the 21st November, except from one comparatively small area.

Irish cattle continue to enjoy comparative immunity from

ANTHRAX. Anthrax, of which disease only 5 outbreaks, involving the death of 5 animals, were

reported throughout the country during the year ended 30th September last. For the corresponding period in 1911 there were 9 outbreaks and 19 cattle died.

In the period ended 30th September, 1912, the outbreaks of Swine Fever numbered 259. This total

SWINE FEVER. is substantially above the annual average for some years past. The number in 1911

was 137.

As regards sheep scab during the year ended 30th September, 1912, 838 outbreaks were recorded as

SHEEP SCAB. against 894 in 1911, a reduction of 56.

Close attention continued to be paid to the enforcement of dipping as a protection against the disease. Two dippings annually of all sheep throughout Ireland are now required. In 1911, the latest year for which figures on the subject are yet available, 2,543,762 sheep were returned as having received the prescribed summer dipping, and 1,910,424 the autumn dipping.

Sixty-one outbreaks of this disease occurred during the twelve months ended 30th September. This

PARASITIC MANGE. record is practically the same as that for 1911 when 58 outbreaks occurred.

The position as regards Glanders is very satisfactory. No

GLANDERS. outbreak of this disease occurred since the 17th May, 1911.

6.—TRANSIT AND MARKETS.

Under this head are grouped matters relating to—

The transit of animals;

The transit of produce;

Railway rates;

The enforcement of the Sale of Food and Drugs Acts as regards butter, margarine, cheese, margarine-cheese, and milk;

The Merchandise Marks Acts;

The action taken by the Department's staff in Great Britain; and
The Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891.

TRANSIT OF ANIMALS.

The Transit Inspection Staff supervised the conveyance of animals in Ireland and the forwarding of animals from the ports.

The restrictions on the admission of animals to Great Britain consequent on the outbreaks of Foot and Mouth Disease in this country caused a falling off in the numbers exported especially in the case of cattle.

The numbers exported to Great Britain and the Isle of Man during the periods of eleven months ended the 30th November, 1911, and the 30th November, 1912, were :—

	Cattle.	Sheep.	Swine.	Total.
1st January to 30th November, 1911 .	646,105	626,486	277,596	1,550,187
1st January to 30th November, 1912 .	515,437	591,172	241,175	1,347,784

Detailed information as to the transit of animals will be found in the Annual Reports (published separately) of the Department under the Diseases of Animals Acts.

TRANSIT OF PRODUCE.

Close attention is given by the Transit Inspectors to all matters relating to the conveyance of produce. The Inspectors visit railway stations and ports, and the arrangements for dealing with the traffic, the methods of handling, and also the condition of the consignments are under observation. Any defects reported by the Inspectors as to the manner of dealing with consignments on the part of the servants of carriers are brought under the notice of the carriers concerned, and consignors are communicated with in any instances in which it appears that due care has not been given to the preparation of the packages.

The numbers of Inspections at Railway Stations and Ports were :—

No. of Inspections at Railway Stations in Ireland, ..	951
" " " Railway Stations in Great Britain, ..	33
" " " Ports in Ireland,	222
" " " Ports in Great Britain,	16

The Inspectors called on a large number of merchants in the principal distributing centres in Great Britain and made, as on previous occasions, inquiry as to the condition in which Irish produce arrived at the markets. Various questions relating to the preparation of consignments, delays in transit, etc., were discussed. It is regrettable that there was again complaint as to damp packing material in cases of eggs.

The coal strike which took place last Spring caused very serious loss to persons interested in the export of Irish produce owing to dislocation of rail and shipping services.

Butter.

Comparatively few instances of the use of unsuitable boxes came under notice. On several occasions
 PACKAGES. boxes the lids of which were broken were observed by the Inspectors. The lids in such cases had, however, not been properly fitted, being left projecting over the sides. Projecting lids are a source of danger to consignments. In some cases boxes seen in transit had apertures at the joinings of the boards—the nails fastening the parts together having drawn. The use of longer or cemented coated nails would have obviated this defect.

Increased care appears to be exercised by carriers in protecting consignments of butter from damage
 PROTECTION from adverse conditions of weather
 DURING during transit. In only comparatively few
 CONVEYANCE. cases was it represented to the Inspectors that consignments received at cross-channel markets bore indications of exposure to the weather.

On a few occasions it was noticed that packages containing 56 lbs. of butter, were allowed to drop
 LOADING AND heavily out of the hands of porters when
 HANDLING being placed in railway wagons or in trans-
 CONSIGNMENTS. ship sheds. Attention was called to the risk of damage involved in such careless handling. There were also some instances of the loading of butter with substances likely to taint the produce. Such want of care was mainly confined to consignments loaded at small stations into passing trains.

The use by shipping companies of crates for stowing smaller packages of butter is extending.

It is satisfactory to note that there is an improvement generally in the manner of handling butter traffic.

Applications for the use of refrigerator vans provided by
 REFRIGERATION : Irish railway companies for the con-
 RAILWAY VANS : veyance of butter traffic are, it appears,
 STEAMSHIPS. comparatively few, and tend rather to diminish than to increase.

On the other hand in Great Britain the use of refrigerator vans appears to be on the increase. During warm weather practically a regular service of refrigerator vans for the conveyance of Irish butter is given on some of the larger lines. Possibly the small number of applications for the supply of refrigerator vans in Ireland is due to the charge made for the icing of the vehicles. In Great Britain no charge is made for

the icing of the vans used on the lines to which reference has been made.

The refrigerating arrangements made by some of the shipping companies in connection with the conveyance of butter from Irish ports to Great Britain are much appreciated by consignors.

Sixteen of the vessels engaged in the trade (five from Dublin, five from Cork, four from Rosslare and two from Waterford) are now fitted with refrigerating apparatus.

Eggs.

There has been a noticeable improvement both as regards the quality and the scantlings of the timber
 CASES. in the cases used for the conveyance of eggs. Cases to contain three or four hundred eggs are coming more into use.

The clasps for securing the lids and bottoms of cases forwarded by some exporters were not of sufficient strength. Weak clasps are liable to get broken in transit, and when such breakage occurs damage to the contents of the case usually results.

The defect mentioned in previous reports that the spaces between the boards forming the cases were so large as to admit of eggs being removed came under notice to a less extent than formerly.

Cases in which the packing material was damp came rather frequently under the observation
 PACKING of the Inspectors and the arrival of cases
 MATERIAL. with damp packing material formed the subject of complaints by merchants in Great Britain. In some instances sufficient care is not taken to ensure that the material is in a perfectly dry condition at the time of packing, in others the cases are not fully protected from rain at markets, at consignors' premises, during conveyance to the places of despatch, or at the premises of carrying companies. Suitable action is taken with a view to prevent recurrences.

There was practically no further advance made by Local
 COVERED Authorities as regards the provision of
 MARKETS. sheds for the protection of perishable produce at markets. The absence of such covered accommodation is most noticeable at market centres in some of the largest egg-producing districts. The Department take advantage of every opportunity which presents itself to impress on the parties concerned the desirability of providing at markets covered enclosures for the protection of produce from adverse conditions of weather.

Complaints as to breakage still continue. Enquiry is made in each case, but it is usually a matter of much difficulty to ascertain at what point the damage took place.

HANDLING OF CONSIGNMENTS.

The Companies' instructions are explicit as to the need for carefully handling consignments, special arrangements are from time to time made for keeping consignments under observation at points on the route and the Department's Inspectors give special attention to the manner of dealing with consignments in transit.

The Inspectors, however, report that there has in recent years been a gradual improvement in the manner of handling cases of eggs.

Fruit.

The heavy traffic from the fruit-growing districts appeared to have been dealt with in a satisfactory manner.

Improvements in transit arrangements were made at several railway stations in the principal fruit-growing areas.

Fish.

The Inspectors continued to give attention to the arrangements for the conveyance of consignments of fish and to the manner of loading and unloading consignments. Cases of delay in conveyance were investigated.

A representation as to the handling of the fish traffic at a port was made to the Department. The treatment of the traffic at the port had been frequently under observation and the work of unloading and loading was, as a rule, very carefully done. During subsequent visits there was no reason to find fault with the methods of handling the traffic.

Cream.

The traffic in cream from Ireland to places in Great Britain is increasing. Some dissatisfaction was expressed by consignors of cream in regard to delays in the return of empty cream churns or the delivery, to consignors, of churns other than those forwarded by them. The delays and misdeliveries would appear to be largely due to plates containing the names and addresses of consignors not having been provided for the churns. In some cases it appeared that the names and addresses were marked in pencil.

Potatoes.

It was noticeable that during the latter part of 1911 and the Spring of 1912 there was a large export traffic in potatoes from the north of Ireland. As many as 200 wagons were under load at one time in a Belfast goods station. For a time the traffic was so large that the railway companies found it difficult to make available the requisite supply of wagons.

Fresh Meat.

Fresh meat is forwarded from several places in Ireland the bulk of the consignments being sent

MARKETS.

to the London market. Among the other places to which the meat is consigned are Birmingham, Manchester, Cardiff and Swansea. At several of the places of despatch attention was given to the work of suitably organising the business, while at other places the shipment of fresh meat (beef, mutton, pork and veal) was undertaken as a temporary expedient to tide over a period during which restrictions were imposed on the transit of live animals owing to the outbreaks of Foot and Mouth Disease. From the beginning of December to Christmas there was a marked increase in the quantities forwarded to England. Taking the 7th, 8th, and 9th December the quantities shipped at the North Wall were respectively 60 tons, 157 tons, and 80 tons.

The carcasses in many of the consignments are wrapped in

CRATES,
HAMPERs,
WRAPPERS.

coarse canvas; some shippers forward mutton, pork and veal in strong hampers, while crates are used by several consignors for the conveyance of pork. In the case of all consignments it would be preferable that the meat should not be handled from the time it is despatched until it is exposed for sale at the markets. The use of hampers or crates obviates the necessity for handling in transit, but as regards long sides of beef forwarding in crates or hampers does not seem practicable. For the conveyance of mutton, pork or veal crates are preferable to hampers. In crates the risk of any depreciation in transit is very slight, the carcasses being suspended from the tops of the crates in a free current of air. When conveyed in hampers the carcasses are placed one over the other, there being from 4 to 6 carcasses in each hamper, and consequently the meat may not arrive in the markets in that condition which is essential to the obtaining of the best prices.

The traffic in pork to London, Manchester, and Birmingham

PORK.

is attaining rather large dimensions. For some time leading salesmen in the London market had ceased to sell Irish pork owing to the unsatisfactory condition in which the consignments reached the market. In July last, however, a Co-operative Society, having been informed that a keen demand existed in London, Manchester, and other places for fresh pork, decided to forward to London some trial consignments. The pork was sent in crates and the result proving satisfactory the business was continued so that at about the middle of October 988 carcasses had been forwarded. As a result of the success obtained in this case, the forwarding of pork from other places to London, Manchester and Birmingham was undertaken.

The project was also successful in these cases. It may be mentioned that 704 carcases were forwarded from one of these places to London during the month of October.

The Carrying Companies have made special provision in regard to the traffic. Reduced rates have been put into operation, arrangements for the speedy transit of the consignments have been made, special vans are being provided for conveyance ; at the ports, large wooden trays or canvas sheets have been made available for use in transferring the meat on board the ships, and special attention is given to the careful stowage of the consignments on board.

Delays and Damage in Transit.

One hundred and ninety-three complaints as to delays or damage to consignments in transit were received during the year ended the 30th June, 1912.

The number for the previous year was sixty-nine. The increase must, in a very large measure, be attributed to the dislocation of traffic which resulted from labour troubles during the year.

A summary of the complaints and of the results of the inquiries made regarding them by the Department will be found at pages [253] in the Appendices.

Railway Rates.

During the year ended the 30th June, 1912, ninety complaints as to charges for the conveyance of merchandise were received. The complaints related to butter, cheese, corn, cream, fresh meat, eggs, feeding stuffs, fish, fruit, live stock, milk, potatoes, poultry, etc.

Ten of the complaints had reference to the non-existence of through rates. Through rates were fixed in seven cases. In one case, a through rate was already in existence. One case is pending.

Thirty-eight of the complaints were to the effect that through rates for the conveyance of consignments were excessive. In thirteen of the cases reduced rates were put into operation and in eight other cases arrangements were made to reduce the charges. In a few cases it was represented that the rates applying to articles of produce sent to large distributing centres in Great Britain were high from certain Irish stations as compared with the charges from other places in Ireland to such centres. It was found on inquiry that comparison had been made as between Owner's Risk and Company's Risk rates or that the lower rates were due to sea competition.

Thirty-two of the complaints related to local rates. Refunds were arranged in eight cases and in one case a reduced rate was put

into operation. In one instance the charge actually made was considerably less than the figure stated by complainant, in another a lower rate applied to larger consignments. In one case the Railway Company concerned did not insist on the payment of a charge in respect of which a complaint was made.

One complaint referred to both local and through rates and one to the Classification in regard to certain goods. The question of regarding 27 firkins of butter as a ton for the purpose of railway charges formed the subject of one complaint.

Four complaints referred to incidental charges made by Carrying Companies in respect of certain consignments. In three of the cases the Companies concerned arranged to make reductions.

One complaint was that increases had been made in the rates charged by the Donegal Railways Joint Committee. Inquiry showed that no increases had been made in charges so far as they related to conveyance over the Donegal line of railway. Increases in charges from stations on the line to places in Scotland had taken place and had been caused by a raising of the rates for conveyance over the sea portion of the journey. The charges between stations on the railways of companies in the North of Ireland and places in Scotland had, it appeared, been increased as from the 1st December, 1911, by 5*d.*, 10*d.*, or 1*s.* 3*d.* per ton (according to the amount of the rate) owing to the increased expenditure involved in the advances which the Steamship Companies had to make in the wages of seamen, firemen, and others and to the increased cost of fuel and other expenses in working ships.

Another complaint was that the rates for the conveyance of goods between Strabane and Belfast had been increased without notice having been given to the public by the companies [Great Northern Railway Company and Midland Railway Company (Northern Counties Committee)]. The Department's inquiries in the matter are not yet completed.

The remaining complaint was that the Great Southern and Western Railway Company had refused to convey by passenger train service at goods train rate butter forwarded from Ennis to Tipperary although the goods train rate had applied to the conveyance of butter forwarded from Ennis to Tipperary by complainant prior to the passing of the Great Southern and Western and Waterford, Limerick and Western Railway Companies' Amalgamation Act, 1900, and had been continued up to the early part of 1912. The Department are in communication with the Railway Company in regard to the complaint.

A summary of eighty-seven of the complaints, the last three complaints referred to above not being included, will be found in the Appendices, page [280].

Reference was made in the Department's Eleventh Annual General Report to a complaint which had been made in regard to the charges for the conveyance of potatoes, grain, etc., between

Belfast on the one hand and Castlewella and other places in the County Down on the other—a rates' war having arisen between the Great Northern Railway Company and the Belfast and County Down Railway Company as regards traffic to and from Castlewella. The Companies came to an agreement as to the questions in dispute—the settlement to come into force on the 1st March, 1912. The rates in force prior to the dispute were again put into operation.

The attention of the Department was drawn to the apparently high charges for the conveyance between Cork and Ballydehob and Skibbereen and Ballydehob of traffic included in Class B. of the General Classification of Merchandise Traffic, and also to the apparently excessive head rates for the conveyance of horses between Skibbereen and Ballydehob and between Ballydehob and Schull. The matter was brought under the notice of the Carrying Companies concerned, who decided to make reductions.

Notice was given that the Great Northern Railway Company and the Midland Railway Company (Northern Counties Committee) intended to
INCREASED CHARGES.
—
CARTAGE.

increase by the sum of 4d. per ton rates from or to Belfast in Classes 1 to 5 of the Classification, where such rates included cartage in Belfast—the altered rates to come into force on the 6th November, 1911. In addition to traffic conveyed on the Great Northern and the Midland (Northern Counties Committee) lines only, the increased rates would apply to traffic between Belfast and stations on the Ballycastle Railway, the County Donegal Railways, the Strabane and Letterkenny Railway, and the Londonderry and Lough Swilly Railway. The increase was, it appeared, due to higher cartage charges in Belfast, consequent on an increase of wages to carters in Belfast.

The Enforcement of the Sale of Food and Drugs Acts as regards Butter, Margarine, Cheese, Margarine-Cheese and Milk.

The duty of administering these Acts is primarily placed on
ADMINISTRATION OF THE ACTS.

the local authorities, i.e., the councils of the thirty-three administrative counties and of the eleven boroughs. The Department are empowered, in relation to any matter which appears to them to affect the general interests of agriculture, to direct an officer to procure for analysis samples of any article of food, and the Department may act in default of a local authority if they are of opinion that the failure of the local authority to enforce the Acts in relation to any article of food affects the general interests of agriculture. The sampling, under the Acts, of imported articles of food is carried out by the Commissioners of Customs and Excise.

In thirty-one of the administrative counties the inspectors under the Acts are members of the Royal Irish Constabulary. In the remaining two counties local officers as well as members of the Royal Irish Constabulary act as inspectors.

Seven of the borough councils—those of Dublin, Belfast, Clonmel, Drogheda, Kilkenny, Limerick and Waterford—employ local officers in the work of administering the Acts. In Limerick and Waterford members of the Royal Irish Constabulary also act as inspectors: while in the remaining four boroughs—Cork, Londonderry, Sligo, and Wexford—the duties are performed by members of the Royal Irish Constabulary.

During the year 1911 the inspectors in the counties obtained for analysis 9,829 samples of butter, margarine, cheese and milk. The total for the year 1910 was 9,173, the increase (656) being distributed over all the articles mentioned. The numbers of prosecutions and convictions in respect of samples taken in 1911 were 334 and 293 respectively, and the penalties imposed amounted to £271 16s. 11d. The figures for the year 1910 were, prosecutions 308, convictions 260, penalties £237 12s. 8d. The proportion of prosecutions to the total number of samples taken shows only a very slight variation.

The total number of the samples of butter, margarine, cheese and milk taken by the inspectors in the boroughs during the year was 4,020, as compared with 4,030 in 1910. The prosecutions, however, increased in number from 238 in 1910 to 332 in 1911, the convictions from 219 in 1910 to 308 in 1911, and the amount of the penalties imposed from £340 4s. 7d. in 1910 to £625 10s. 9d. in 1911. The increases were all in regard to samples of butter and milk. As regards butter the particulars for the two years are:—

1910 786 samples taken, 26 prosecutions, 25 convictions, £56 2s. 1d. penalties.

1911—785 samples taken, 40 prosecutions, 39 convictions, £99 15s. penalties.

In the case of samples of milk the increase in the number of prosecutions has been continuous for the past three years, the details being:—

	Samples.	Prosecutions.	Convictions.	Penalties.
1909	3170	180	127	£228 4 0
1910	3135	205	188	277 7 6
1911	3153	289	266	521 15 9

The increase in the number of prosecutions may be accounted for by the adoption of more successful methods of detection. It may also point to the conclusion, that generally speaking, the penalties imposed have not been sufficient to act as a deterrent. In cases of adulteration the person culpable is liable to imprisonment for a third offence. Food frauds in large centres mean, in the

majority of cases, the victimising of the poorer class of purchasers, and with a view to the protection of such purchasers, especially in regard to milk, this question of imprisonment in the more glaring cases is a matter for serious consideration. Indeed, action in this direction has already been taken in the county borough of Dublin where during the half year ended the 30th June last, a defendant convicted of an offence in connection with the sale of a sample of milk was ordered to be imprisoned for two months.

The following table gives particulars of the numbers of samples of butter, margarine, and milk taken by officers of the local authorities in each of the years 1907, 1908, 1909, 1910 and 1911, the numbers of prosecutions and convictions, and the amounts of the penalties imposed :—

YEAR.	BUTTER.				MARGARINE.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.				£ s. d.
1907	4,539	190	157	131 4 6	164	8	8	7 15 0
1908	4,538	168	137	121 18 0	173	16	14	24 6 0
1909	5,184	150	140	190 18 2	156	8	7	14 2 0
1910	4,655	124	116	111 14 10	137	9	8	8 18 1
1911	5,027	204	191	196 16 2	140	10	9	9 9 0

YEAR.	MILK.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.
1907	8,179	371	324	422 15 6
1908	8,563	425	363	592 3 4
1909	8,402	371	331	475 8 3
1910	7,856	413	355	457 4 4
1911	8,101	451	401	691 2 6

Tables giving details as to the samples of butter, margarine, cheese, margarine-cheese, and milk taken by inspectors in the counties and boroughs during the year 1911 and the half year ended the 30th June, 1912, will be found at pages [292]-[297] of the Appendices.

When samples are taken by the Department's officers for analysis, the result of the analysis is, in each case, to be communicated by the Department to the local authority of the district in which the sample was obtained, whereupon the duty and power of instituting proceedings in any case in which an infringement of the

Acts appears to have taken place devolve upon the local authority. During the year 1911 three of the officers of the Department obtained for analysis 821 samples—of which 818 were sold as butter and 3 as margarine. One hundred and thirty-three of the samples of butter were taken at markets. The samples were purchased in 30 counties and 7 boroughs.

Thirty-three of the samples sold as butter were found on analysis to contain more than 16 per cent. of water, one was certified as containing at least 84 per cent. of fats foreign to butter, and one as containing at least 87 per cent. of such fats.

The local authorities concerned instituted proceedings in regard to 15 of the samples found to contain excess water. Convictions resulted in 14 cases, and penalties amounting to £6 4s. 1d. were imposed. One case was dismissed on the ground that the water (the sample was certified as containing 19 per cent.) had not been fraudulently added to the butter. The case appeared to be one in which the decision of the magistrates should be reviewed, but, as the sanction of the local authority for such a proceeding could not be obtained within the prescribed time, further action was not taken in the matter. In 13 cases the excess was considered too slight for the institution of proceedings. In one case the Analyst stated that having regard to the weather conditions he did not consider the percentage of water too high, and in the remaining four cases it was not found practicable to have proceedings instituted within the time limit. In these cases the Department suggested that the local authorities should caution the vendors.

Prosecutions were undertaken in respect of the two samples found to contain fats foreign to butter. Convictions resulted and fines amounting to £15 were imposed.

Nineteen of the samples taken were of salt firkin butter. In none of these cases did the proportion of water exceed 16 per cent.

In connection with the sale of two of the samples of margarine the requirements as to marking were not complied with. In one case the margarine was not labelled in the prescribed manner and the sample was delivered in a wrapper on which the word "Margarine" was not printed. Proceedings were taken on behalf of the local authority, a conviction was obtained, and penalties amounting to £1 8s. 11d. were imposed. In the other case the wrapper in which the margarine was delivered was a plain paper one—the word "Margarine" not being printed thereon. Proceedings were, however, not instituted in this case as the time limit expired before legal action could be taken. The Department suggested to the local authority concerned that the vendor should be warned.

One instance of refusal to sell a sample to an officer of the Department occurred during the year. The officer entered a shop and having made inquiry as to the price of butter asked for a sample from a piece which the assistant had pointed out as for sale at 1s. 2d. per lb. The assistant proceeded to supply him, when the officer, who had noticed that the piece from which the sample was being taken consisted of two portions neatly put together, asked that the quantity required, one pound, should be cut from the side of the piece opposite to that from which the assistant was taking it. The price for the quantity required was tendered by the officer. The assistant refused to supply the sample from the part indicated. The Department communicated the facts of the case to the local authority who took proceedings against the owner of the shop for an offence under Section 17 of the Sale of Food and Drugs Act of 1875. The defendant was convicted and fined £5.

During the half-year ended the 30th June, 1912, 564 samples of butter, 3 samples of margarine and 1 sample of cream were obtained on behalf of the Department in 30 counties and 5 boroughs. Of the samples of butter 56 were taken at markets.

Five of the samples of butter were found on analysis to contain more than 16 per cent. of water. The results of the analyses were communicated to the local authorities who instituted proceedings in respect of four of the samples. A conviction followed in each case. In the fifth case the local authority cautioned the vendor.

Of the samples of margarine one was taken from a package which was not labelled in the prescribed manner, was delivered to the purchaser in a wrapper not bearing the word "Margarine," and was found on analysis to contain an excessive proportion of water—17 per cent. Proceedings were instituted by the local authority, convictions followed and penalties to the amount of £2 2s. 3d. were imposed.

Tables giving particulars as to the samples taken during the year 1911 and the half year ended 30th June, 1912, are printed at pages [298]-[299] of the Appendices.

On the 30th June, 1912, the numbers of premises registered as manufactories of margarine and margarine-cheese were five and two respectively. In one case it appeared that very little, if any, margarine-cheese had been made on the premises.

Notifications were received that ten registrations for wholesale dealings in margarine or margarine-cheese were effected during the year ended 30th June, 1912, and that registrations for wholesale dealings in eight cases had been cancelled in the period. There was thus an increase of two in the number (132) of premises registered on the 30th June last as compared with the number on the 30th June, 1911. The registrations took place in Belfast (eight), Waterford Borough (one), and County Galway (one), and the cancellations in Belfast (seven) and Dublin Borough (one).

A Table showing as on the 30th June, 1912, the distribution of the registered manufactories and wholesale dealers, premises will be found at page [300] of the Appendices.

Sections 7 and 24 of the Sale of Food and Drugs Act, 1899, provide that every occupier of a manufactory of margarine or margarine-cheese and every wholesale dealer in such substances, shall keep a register showing the quantity and destination of each consignment of such substances sent out from his manufactory or place of business, and that this register shall be open to the inspection of any officer of the Department. In the exercise of this power the registers kept by manufacturers and wholesale dealers are from time to time inspected on behalf of the Department, and the information so obtained is often of much use to the Department in connection with the work of securing that the regulations as to the marking of parcels of margarine are duly observed.

In a few cases the registers did not seem to be posted up to date. Communications as to the need for properly keeping the registers were sent to the wholesale dealers concerned.

The Department's power of inspection was of assistance to a local authority in connection with a case in which proceedings had been instituted against a trader for having forwarded margarine by public conveyance without consigning it as margarine. Particulars as to purchases of margarine by the defendant were extracted from the register kept by a wholesale dealer in that substance and were supplied to the local authority. The prosecution was successful, the defendant being heavily fined.

Section 1 of the Butter and Margarine Act, 1907, requires that any premises on which by way of trade butter is blended, reworked, or subjected to any other treatment but not so as to cease to be butter be registered as a butter factory with the local authority. On the 30th June, 1912, the number of butter factories registered was 162. These factories were situated in 20 counties and 6 boroughs. As compared with the total number registered on the 30th June, 1911, there is a decrease of eleven—registrations having been cancelled in 17 cases during the twelve months and 6 new registrations having been effected. The factories registered during the year were situated as follows:—three in County Cavan, one in County Donegal, one in County Wicklow, and one in Belfast. The premises of which the registrations were cancelled were located in nine counties and two boroughs:—four in County Cork, three in County Tipperary (S.R.), two in County Kerry, one in each of the counties of Cavan, Limerick, Longford, Monaghan, Tyrone and Waterford, and one in each of the Boroughs of Clonmel and Limerick.

A statement showing the number of butter factories in each administrative area will be found at page [300] of the Appendices.

Under the provisions of the Butter and Margarine Act officers of the Department are empowered to enter at all reasonable times any registered butter factory, to inspect any process of manufacture, blending, reworking or treatment used in the factory, and to take samples for analysis. Numerous inspections were accordingly made during the year in premises registered as butter factories, and a large number of samples of butter and some samples of preservatives were taken.

In no case was any oil or fat which might be used in the adulteration of butter found in a butter factory.

During the visits inquiry was made as to the markings on boxes, wrappers, etc., used for the forwarding of butter from the factories. In cases in which it was considered that the descriptions applied to the butter would mislead, suitable action was taken with a view to secure the discontinuance of the descriptions.

Technical advice was in one instance sought by the owner of a butter factory under somewhat unusual circumstances. Butter, farmers' unsalted separator lumps, which had been blended and salted at the factory became white and tallowy after being kept for some time in a cool cellar or in cold store. Complaint had, it appeared, been made by different merchants as to the quality of the butter, and the value of the butter involved was considerable. One of the Department's instructors investigated the matter. He located the

cause of the trouble, and by his advice certain structural alterations were effected at the factory with a view to preventing a recurrence.

Premises which are reported to be used as butter factories, but which are not registered as such, are visited by officers of the Department, and the requirements of the Act in regard to registration explained to the proprietors. A number of the registrations effected during the period under review resulted from such action.

Of the samples taken at butter factories during the year ended the 30th June, 1912, the great majority
 SAMPLES TAKEN IN were obtained as a test. Water in excess
 BUTTER FACTORIES. of 16 per cent. was found in 28 of these
 test samples, the excess in 17 of the samples
 not exceeding 1 per cent. Communications drawing attention
 to the 16 per cent. limit were sent to the proprietors of the factories. In twelve cases it appeared that the butter had not been subjected to treatment in the factories.

In cases in which test samples are found to contain water in excess formal sampling is subsequently carried out.

Thirty-three samples were formally taken. It may be mentioned that formal sampling at a factory does not, as a rule, take place until a test sample has been found to contain water in excess. Two of these samples contained more than 16 per cent. of water. In one case the excess was very slight—0·1 per cent. In the other case the sample contained 19·5 per cent. of water. A prosecution was instituted by the local authority, a conviction resulted, and a fine of 2s. 6d., together with 10s. costs was imposed.

In one case the analysis showed that a sample of butter taken in a butter factory contained boron preservative in excess of the maximum proportion—0·5 per cent., expressed as boric acid—admissible according to the recommendation of the Committee appointed by the President of the Local Government Board, London, in 1899 to inquire into the use of preservatives in food. The proprietors, on being communicated with in the matter, stated that an extra quantity of preservative had been used in working the butter, but that more butter would have been added the following day and that then the amount of preservative would be within the proportion permissible.

Under Sections 2 (3) (b) and 14 (1) of the Butter and Margarine Act, 1907, the Department are
 SPECIAL empowered to authorise specially any of
 INSPECTIONS UNDER their officers to enter any premises whenever
 SECTION 2 (3) (b) they have reason to believe that butter is
 OF THE BUTTER by way of trade either made or stored on
 AND MARGARINE the premises and that for the purposes of
 ACT. the Sale of Food and Drugs Acts or the
 Butter and Margarine Act inspection is
 desirable. Any officer so authorised has the like powers of entry,

inspection, and sampling as if the premises were registered under those Acts. During the year twenty samples of butter were taken in pursuance of these exceptional powers and were found on analysis to be pure.

Fancy or other descriptive names may not be used in Ireland in connection with margarine

NAMES FOR MARGARINE. unless such names have been approved by the Department. Applications for the approval of fourteen names for margarine

were received by the Department during the period, and in eleven of these cases approval was granted. The names approved are:—Aero, Bee, Crenut, Honey-Nut, Kernel, Milnut, Red Dragon, Snowdrop, Sweetgale, Texwell, and Verbena.

Lists of the names approved by the Department are issued to the local authorities for use by the officers engaged in the administration of the Sale of Food and Drugs Acts.

The total number of names for the use of which in Ireland approval had up to the 30th June, 1912, been given was 434.

The Department are informed by the Commissioners of Customs and Excise that, acting under

SAMPLES TAKEN AT IRISH PORTS. Section 1 of the Sale of Food and Drugs Act, 1899, and Section 5 of the Butter and Margarine Act, 1907, officers employed by

the Commissioners took at Irish ports during the year ended the 30th June, 1912, eighteen samples, viz.: 1 sample of butter, and 6 samples of margarine at Dublin; 1 sample of butter, 5 samples of margarine and 1 sample of condensed milk at Belfast and 4 samples of margarine at Cork. In no case did any infringement of the provisions of the sections appear to have taken place.

Acting under the powers conferred on them by Section 4 of the Sale of Food and Drugs Act, 1899, the

THE SALE OF MILK REGULATIONS, 1912, ENGLAND & WALES. Board of Agriculture and Fisheries, on the 29th June, 1912, revoked Regulation 3 of the Sale of Milk Regulations, 1901, which was as follows:—“Where a sample of

skimmed or separated milk (not being condensed milk) contains less than 9 per cent. of milk-solids, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-solids other than milk fat, or the addition thereto of water,” and made the following regulation:—

“Where a sample of skimmed or separated milk (not being condensed milk) contains less than 8·7 per cent. of milk-solids other than milk-fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1907, until the contrary is proved, that the milk is not genuine, by reason of either the addition thereto of water, or the abstraction therefrom of milk-solids other than milk-fat.”

The Board of Agriculture and Fisheries had, the Department learned, received representations from local authorities and others objecting to Regulation 3 of the Sale of Milk Regulations, 1901, on the ground that the presumptive limit of 9 per cent. fixed therein admitted of the possibility of adulteration by the addition of water in cases where the milk had been imperfectly skimmed. No such representations have, so far, been received by the Department, and the Sale of Milk (Ireland) Regulations, 1901,—fixing a limit of 9 per cent. of milk solids—still apply in the case of skimmed or separated milk in Ireland. The new Regulation should suit fully in the case of separated milk or skimmed milk in which only a very small percentage of fat is allowed to remain, but, in the case of skimmed milk in which the proportion of fat not removed is 1 per cent. or over, the proportion of non-fatty solids may possibly not reach the percentage specified (8·7). The question of issuing an amended Regulation in regard to skimmed or separated milk has been deferred until experience has been gained of the working of the Sale of Milk Regulations, 1912, in England and Wales. It may be mentioned that the sale of skimmed milk in Ireland is comparatively small.

A list of the Analysts under the Sale of Food and Drugs Acts for the boroughs and counties in Ireland
 ANALYSTS. is printed at page [301] of the Appendices.
 During the year Mr. T. R. Hodgson, M.A., F.I.C., Poulton-le-Fylde, Lancashire, was appointed Public Analyst for the County Antrim.

The Merchandise Marks Acts (Ireland).

Much inspection work is performed, especially in the principal centres, by officers of the Department in regard to the descriptions applied to various articles. Four prosecutions were instituted in respect of eggs, lace and linen (two cases). The prosecutions were successful.

The markings on wrappers, cartons and boxes in which foreign butter was forwarded from places in this
 BUTTER. country formed the subject of a number of investigations. In several cases the markings were altered.

Butter which had been blended or re-worked at butter factories was, it appeared, in a few cases described as creamery butter or dairy butter. Suitable action was taken by the Department as to such use of these descriptions.

A case came under notice in which butter made on a farm had been consigned in a box branded "Pure Irish Creamery Butter." The sender ceased to use boxes so branded.

During the period a few complaints as to the descriptions under which eggs were being sold were received by the Department. Inquiries were made but it did not appear to the

EGGS.

Department that any infringement of the Acts had taken place.

The accuracy of descriptions under which eggs were exposed for sale was constantly looked into, and purchases were made for purposes of examination when such a course was considered desirable. Arising out of this work one prosecution was instituted in respect of the sale of foreign eggs as Irish. An officer of the Department while engaged on inspection work in Dublin observed that certain eggs which were exposed for sale were described as "Irish New Laid," the price being marked 1s. Genuine fresh Irish eggs were being sold at a much higher price than a shilling a dozen at the time (December), and the officer, returning to the premises on the following day, purchased two dozen eggs from a basket labelled "Guaranteed Irish New Laid 1s." The proprietor of the shop when asked for a receipt stated that the eggs were not new laid and subsequently admitted that they were not Irish. Expert opinion having confirmed the accuracy of these admissions proceedings were instituted by the Department and the case was heard in the Dublin Police Court (Southern Division) on the 22nd January, 1912. The defendant was convicted and was fined £3.

Prosecutions were instituted at the instance of the Department in two cases in which during the period articles incorrectly described as linen had been sold.

LINEN.

In one case collars and cuffs which bore markings including the words "Erin Linens" were purchased by an officer of the Department at premises in Belfast. Examination showed that the goods were composed entirely of cotton. The manager of the premises and the assistant who sold the articles were prosecuted (the proprietors of the business did not reside in Ireland) and the manager, on whose behalf a plea of guilty was entered, was fined £5 with costs. Counsel for the defence stated that it had been decided to cease to use the words "Erin Linens" in connection with goods which might be considered to be of the nature of linen. The proceedings were undertaken by the police on instructions from the Irish Government.

In the second case six collars which had been purchased at a shop in the city of Cork by an officer of the Department were described as linen collars in the receipt given in respect of the purchase. Three of the collars were found to be composed entirely of cotton and the remaining three to be composed of three parts of cotton and one part of union (linen and cotton mixed). Proceedings were instituted against the proprietor of the shop, a conviction resulted, and a fine of £2, together with costs amounting to £6, was imposed. Instructions to prosecute were given in this case also by the Irish Government.

Complaints were received by the Department to the effect that quantities of foreign lace and crochet were sold as Irish at places in this country largely patronised by tourists. Action

LACE.

was taken with a view to the prevention of any such sales and proceedings were instituted by the Department against a trader at Killarney in respect of a collar which was sold in July last as an "Irish Crochet Collar" to an Inspector of the Department, but which, in the opinion of experts to whom it was submitted for examination, had not been made in Ireland and was probably of Austrian manufacture. The defendant was convicted and fined £1 1s. 0d.

The proceedings in this case should prove of benefit to the Irish lace and crochet industries. Large quantities of lace are sold each year at the principal tourist resorts in the South of Ireland. The demand is for Irish lace, and the substitution to any marked extent of foreign lace, when Irish lace is asked for, would seriously interfere with the means of livelihood of numbers of workers who can ill afford the slightest diminution of their earnings.

The descriptions under which lace and crochet are sold at tourist centres will continue to receive attention.

It was represented to the Department that foreign beef was being sold in a large centre to customers who believed that they were being supplied with Irish meat. Inquiries showed that

MEAT.

both Irish and foreign meat were sold at the same premises but that the foreign meat was described simply as meat—no information being given as to its origin.

Inquiries were also made regarding sales of Chinese bacon in this country. This article was, it appeared, sold as bacon. No evidence was forthcoming to show that the bacon had been represented as of Irish production.

The use of the name "Champagne Cider" or "Champagne Cyder" for aerated waters was the subject

"CHAMPAGNE
CIDER."

of considerable correspondence between the Department and mineral water manufacturers. As a result the application of the description in question to such beverages has been discontinued, names such as "Ciderette," "Cyderette," "Ciderade," "Ciderine" having been substituted. In one case the name "Aerated Cider" was altered to "Aerated Ciderette." The discontinuance of the use of the name "Cider" or "Cyder" in connection with liquids not prepared or derived from apples should beneficially affect the genuine cider industry in Ireland.

In the course of their inquiries as to "Champagne Cider" the Department learned of the sale of a beverage described as Perry Champagne. The result of the analysis of a sample having been to the effect that the preparation was not made

from pears, the manufacturers were communicated with in regard to the use of the word "Perry." The name "Perryette" was adopted for the beverage.

During the period the attention of the Department was also drawn to descriptions applied to candles, bicycles and matches. In no case were the circumstances such as to warrant the institution of legal proceedings.

The Department are empowered by the Merchandise Marks (Ireland) Act, 1909, to make, with the concurrence of the Lord Chancellor of Ireland and of the Board of Trade, regulations providing that in certain cases the prosecution in Ireland of offences under the Merchandise Marks Act, 1887, be undertaken by the Department. Acting in accordance with this power Regulations dated the 14th April, 1910, were made, and also a Supplementary Regulation dated the 31st October, 1911. These Regulations have since been included in one set of Regulations. The fresh Regulations, dated the 7th May, 1912, are printed on page 33 of the Appendices.

Action taken by the Department's Staff in Great Britain.

The work of the Department's staff in Great Britain—one Inspector and five Assistants—for the prevention of frauds affecting Irish produce was continued. Attention was given to descriptions, as applied to goods, denoting Irish origin; and where the methods of trading were open to suspicion, purchases were made for the purpose of examination. In some cases prosecutions were instituted; in others, the firms concerned, on being interviewed, undertook to withdraw the descriptions regarded as misleading, and gave satisfactory assurances as to future trading. Inquiries were made into complaints of delay, damage and pilferage of Irish produce in transit. Visits were made to several markets in the interests of Irish agricultural produce.

Samples of Irish butter were obtained regularly in different parts of the country. The result of the examination of the samples showed that greater care was being taken as regards marking and verbal descriptions. This improvement was no doubt due to the watchfulness which is now generally known amongst traders to be exercised by the inspection staff, and to the prosecutions which have been instituted.

Complaints in regard to the quality of butter or the percentage of moisture in butter, and as to short weight, were frequently received by the Inspector. Where practicable the butter was examined, and the subject of dispute was invariably settled to the satisfaction of the parties concerned.

In several districts where formerly margarine had been supplied as Irish butter, samples were taken and a decided improvement was noticed—margarine being supplied in very few cases. In Glasgow, however, margarine was supplied in a fairly large number of cases where Irish butter was asked for. The names of the traders were given to the local authority by the Inspector, and in all instances official samples were subsequently taken and convictions obtained.

Descriptions which indicated that the eggs so described were

EGGS.

of Irish origin but which appeared to be inaccurate were investigated. In some instances it was admitted that the eggs were not Irish, and, on an assurance being given that the misdescriptions would be discontinued, it was considered that a caution would be sufficient; in others, although the eggs were undoubtedly of foreign origin, the necessary evidence for successful proceedings under the Merchandise Marks Act was not available.

In two cases, however, proceedings were instituted by the Board of Agriculture and Fisheries at the instance of the Inspector. A firm trading in Bristol was prosecuted for describing foreign eggs as "Irish New Laid." The evidence showed that the eggs were offered at a figure much below the current market price for Irish eggs, and had been repacked into a case of the Irish type which appeared to have been used more than once. The Magistrate stated that the offence was a very bad one, and fined the defendants £10, with £10 10s. costs. At Preston a dealer was convicted and fined 20s., with the alternative of fourteen days' imprisonment, for selling Russian eggs as Irish.

Repacking of foreign eggs into cases of the Irish type was observed at the premises of two egg merchants. The firms concerned were informed that they were liable to prosecution, and they gave an undertaking that the procedure complained of should not recur.

The descriptions applied to bacon received attention, and

BACON.

purchases were made in cases where the methods of sale were regarded as suspicious. A prosecution was undertaken by the Board of Agriculture and Fisheries, at the instance of the Department's Inspector, against a trader having shops in different parts of London, for selling hams to which a false trade description appeared to have been applied. The hams in question, which were what is known as "picnic" were labelled and sold as "Denny's Best Irish Hams," but were much inferior in quality, being valued at 6½d. per lb., whereas the price of Denny's was 1s. 2d. per lb. A representative of Messrs. Denny gave evidence in support of the prosecution. The case was dismissed on the ground that a mistake had occurred through the negligence of the defendant's servants.

The sale of tweed falsely described as "Real Kerry Tweed" or "Kerry Tweed" was the subject of a prosecution, in the Sheriff's Court, Edinburgh, by the Crown Agent, at the instance

TWEED.

of the Inspector. A considerable quantity of tweed so described was sold by a firm in Edinburgh to a distributing concern in London, and was purchased with the object of assisting the weavers and under the impression that it was made in County Kerry. The defendant pleaded guilty, and was fined £30, with the alternative of sixty days' imprisonment.

Several drapery firms in London, who were selling tweeds under misleading descriptions such as "Kenmare," "Kerry Homespun," "Tyrone," "Donegal," etc., the goods not having been made in Ireland, were interviewed and gave an undertaking to discontinue such descriptions. As there is an increasing demand for Irish tweeds, the supply of the genuine article will greatly benefit the Irish industry concerned.

In several cases where the descriptions applied to articles composed of cotton or union would indicate

LINEN.

that the goods were Irish linen, the firms concerned were notified that they were liable to prosecution for a breach of the Merchandise Marks Act, and they undertook to discontinue the misleading descriptions.

At the instance of the Inspector a firm extensively engaged in the manufacture and sale of collars was prosecuted at South Molton, Devonshire, for applying to collars a false trade description, viz.: "True Irish" and for causing such false description to be applied. The defendants pleaded guilty and stated that they had merely carried out an order for another firm and applied the description ordered by the firm. The magistrates, who were unanimous in their verdict, inflicted a penalty of £1 10s., and ordered the defendants to pay the Court fees, amounting to £9 9s. The proceedings were undertaken by the Board of Trade.

The sale of cotton handkerchiefs, described as Irish, by hawkers in the London suburbs, came to the notice of the Inspector, who found on investigation that two parties were concerned. One of the parties traded under the name of the (new) Irish Linen Co., and distributed printed circulars containing an address in Belfast. Interviews were arranged, and when it was pointed out that a breach of the Merchandise Marks Act was being committed, the persons concerned undertook to discontinue the use of titles or marks likely to deceive purchasers.

A linen company in Liverpool, associated with a large firm against whom a conviction had been obtained at the instance of the Inspector, have now ceased to use a trading title which bore relation to Ireland.

At Colchester a trader was prosecuted, at the instance of the Inspector, by the Board of Trade, for having described as "Irish Poplin" goods which were not of that material, but were known

as Bengaline. The magistrates held that the defendant was guilty of a technical offence, and imposed a fine of 5s. In a similar case at Cambridge the defendant pleaded that she thought all poplin was Irish poplin. The magistrates held that, although the defendant had brought herself within the provisions of the Merchandise Marks Act, she appeared to have acted innocently, and, in consequence, they took a lenient view of the case and dismissed the summons.

Early in the year, consequent on complaints received from traders in Ireland, two men were, through

**FRAUDS ON
IRISH TRADERS.** the instrumentality of the Inspector, charged in London, by the Public Prosecutor, with obtaining goods, viz.: poultry

and eggs, by false pretences. The following was the method which they adopted. A communication was sent to the producer, and, by means of false references, he was induced to forward the goods on receipt of which a small payment on account would sometimes be made with the object of obtaining a further and larger consignment. One of the persons charged pleaded guilty, and was sentenced to twelve months' imprisonment with hard labour; and the other, who was already serving a sentence of fifteen months for another offence, was sentenced to nine months' imprisonment, the sentences to run concurrently.

There were several other cases in which the methods of victimising consignors were somewhat similar, but the evidence obtained was not sufficient to bring the cases into Court.

Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891.

Officers of the Department made numerous inspections and inquiries in regard to accommodation for

INSPECTIONS. weighing cattle at fairs where tolls are taken and at auction marts. In cases in

which it was considered that weighing accommodation should be made available or that accommodation already existing should be improved, suitable action was taken by the Department with a view to the provision of the accommodation or the effecting of the improvements by the Market Authorities or the Auctioneers concerned.

New machines for weighing cattle were provided at the Collooney, Killucan, Mohill and New-

**WEIGHING
ACCOMMODATION.** Antrim, and various improvements were effected in the weighing accommodation

at the fairs held at Blacklion, Carlow, Drumcollogher, Drumshambo, Limerick (Great Munster Fair), Sligo and Tubbercurry,

and at an auction mart at Navan. Machines were also made available for weighing cattle at the Knocklong fairs and at auction marts at Listowel and Newmarket.

Correspondence is proceeding in a number of cases in which the Department desire to see new or improved accommodation provided.

During the twelve months ended the 30th June, 1912, the Department issued Orders exempting Market Authorities and Auctioneers from the obligation of providing weighing accommodation for cattle at twenty-seven fairs and sixteen auction marts. A list of the fairs and marts will be found at page [304] of the Appendices.

I have the honour to be,

Your Excellency's faithful servant,

T. W. RUSSELL,
Vice-President.

T. P. GILL,
Secretary.

DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET,
DUBLIN, 13th February, 1913.

APPENDICES

ACCOUNTS :	Page
The Parliamentary Grant,	[6]
The Suspense Accounts,	[7]
The General Cattle Diseases Fund, including the Cattle Pleuro-Pneumonia Account for Ireland,	[8]
The Endowment Fund,	[10]
Details of Special Investigations,	[12]
Details of Miscellaneous Expenses,	[12]
Summary of Loan Accounts,	[13]
 COUNCIL AND BOARDS :	
The Council of Agriculture,	[14]
The Agricultural Board,	[21]
The Board of Technical Instruction,	[22]
The Consultative Committee of Education,	[23]
 AGRICULTURE :	
Table showing the Agricultural Schemes adopted by the several County Committees, and the Amount Allocated for each Scheme, &c.,	[24]
Table showing the Number of Instructors, &c., employed in each County in connection with Agricultural Schemes,	[26]
Scholarships for Students in Agriculture, Horticulture, Forestry, and Creamery Management,	[27]
Prospectus of Albert Agricultural College, Glasnevin,	[29]
Instruction in Fruit Growing and General Gardening,	[31]
Prospectus of Athenry Agricultural Station,	[32]
" Ballyhaise " " " " " " " " " "	[33]
" Clonakilty " " " " " " " " " "	[34]
" Mount Bellew " College,	[38]
The Munster Institute, Cork,	[39]
The Ulster Dairy School, Cookstown,	[40]
School of Rural Domestic Economy, Ramsgange,	[41]
" " " " Portarnna,	[42]
" " " " Killeshandra,	[43]
Apprenticeships in Forestry,	[43]
Notice to Owners of Woods and Persons proposing to form Plantations,	[44]
 Agricultural Schemes, 1911-1912.	
Circular Letter to County Committees,	[45]
Scheme for Encouraging Improvement in the Breeds of Horses,	[47]
Registration of Stallions,	[48]
Nominations of Mares,	[50]
Scheme for Encouraging Improvement in the Breeds of Cattle, 1912,	[53]

AGRICULTURE—continued.

Page

Scheme for Encouraging Improvement in the Breeds of Swine, 1912,	[57]
Loans for the Purchase of Stallions, 1912,	[60]
Loans for the Purchase of Bulls, 1912,	[61]
Subsidies to Agricultural and Industrial Societies, 1911-1912,	[63]
Scheme of Prizes for Cottages and Small Farms, 1912,	[65]
Scheme for Encouraging Improvement in Flax Growing, 1912,	[67]
Scheme of Instruction in Agriculture, 1911-1912,	[69]
Scheme of Winter Agricultural Classes, 1911-1912,	[71]
Scheme of Instruction in Poultry Keeping, 1911-1912,	[75]
Scheme of Tutorial and Practical Classes in Poultry Keeping, 1911-1912,	[80]
Instruction in Butter Making, 1911-1912,	[84]
Scheme for Instruction in Horticulture and the Management of Bees, 1911-1912,	[87]
Scheme for Encouraging Improvement in the Management of Creameries and Auxiliary Creameries,	[91]
Scheme of Loans for the Erection of Village Halls,	[95]
Scheme of Loans for the Erection of Fencing in Congested Counties,	[97]
Scheme of Loans for the Purchase of Agricultural Implements,	[98]
Scheme for Encouraging Improvement in Dairy Cattle,	[99]
Scheme of Loans for the Repair and Equipment of Meal Mills, Kilns, &c.,	[103]
Scheme of Veterinary Dispensaries in Congested Districts,	[104]
Scheme for Encouraging the Breeding of Irish Draught Horses,	[105]
Scheme of Loans to Members of Associations of Fruit Growers,	[105]
Scheme of Agricultural Experiments,	[108]
New Scheme of Field Manurial Experiments,	[115]
Memorandum on Seed Testing,	[117]
Circular to County Councils which have not adopted Part I. of the Weeds and Agricultural Seeds (Ireland) Act, 1909,	[121]
Circular to Owners of Land Requesting the Destruction of Scheduled Noxious Weeds,	[122]
Memorandum. Testing Eggs for Freshness,	[123]

TECHNICAL INSTRUCTION :

Programme of Experimental Science, Drawing, and Domestic Economy for Day Secondary Schools,	[125]
Programme for Technical Schools and Science and Art Schools and Classes,	[130]
Examples of Schemes of Technical Instruction in Non-Agricultural Subjects,	[144]
Forms relating to the conditions of Award of Scholarships offered for competition by the Department,	[168]
Results of Competitions for Scholarships during 1912,	[174]
Table showing by Counties the amounts allocated from the Department's Endowment and from Local Rates for the purposes of Technical Instruction in Non-Agricultural Subjects,	[176]
List of Science and Art Classes, showing Grants made by the Department during the Financial Year, 1911-12,	[180]

ACCOUNTS.

PARLIAMENTARY GRANT.

[Moneys voted by Parliament to defray the Administrative Expenses of the Department, and Expenses connected with the maintenance of the National Museum, National Library of Ireland, Metropolitan School of Art, Royal Botanic Gardens, Royal College of Science, and Geological Survey of Ireland; and to provide for the payment of Grants to Schools and Classes of Science and Art and Technical Instruction, Grants in Aid under the Diseases of Animals Act, under Sec. 15 (d & f) of the Agriculture and Technical Instruction (Ireland) Act, 1899, and to the Congested Districts Board for Ireland under 62 & 63 Vic., cap. 18, s. 5, and 9 Edw. 7, cap. 42, s. 49, and Grants from the Development Fund.]

ACCOUNT OF PARLIAMENTARY GRANT in the Year ended 31st March, 1912.

RECEIPTS.				PAYMENTS.			
	£	s.	d.		£	s.	d.
Parliamentary Grant	426,614	0	0	Salaries, Wages and Allowances, .	60,713	9	1
Appropriations in Aid	10,077	8	9	Travelling, .	11,088	15	10
				Special Services and incidental expenses, .	3,063	14	7
				Collection of Agricultural and Trade Statistics, .	3,524	7	7
				Grants in Aid, under Sec. 15 (d) and (f) of the Agriculture and Technical Instruction (Ireland) Act, 1899, and sec. 49 of the Irish Land Act, 1909, .	37,640	0	8
				Diseases of Animals—Grants in Aid, .	10,290	0	0
				INSTITUTIONS OF SCIENCE AND ART.			
				Salaries, Wages, and Allowances, .	31,944	13	11
				Purchase of Specimens for Museum—(Grant in Aid), .	2,390	0	0
				Purchase of Books for National Library—(Grant in Aid), .	1,300	0	0
				Furniture, materials, &c., and fitting up of objects, .	2,040	0	4
				Royal College of Science—Purchase of Specimens, Books, Apparatus for Laboratories, &c. (Grant in Aid), .	13,875	0	0
				Royal College of Science—Prizes, Scholarships and Examinations .	3,665	10	7
				School of Art—Accessories and Models, Materials, &c., .	309	15	3
				School of Art—Prizes, &c., .	522	15	4
				Botanic Gardens—Purchase of seeds, plants, books, timber and garden sundries, .	340	2	5
				Travelling, .	663	12	5
				Incidental Expenses, .	790	15	9
				SCHOOLS OF SCIENCE AND ART, &c.			
				Annual Grants to Schools and Classes of Science and Art and Technical Instruction, .	25,542	14	10
				Grants for Drawing and Manual Instruction in Miscellaneous Schools .	1,861	13	6
				Grants for Day Secondary Schools, .	27,956	4	9
				GEOLOGICAL SURVEY OF IRELAND.			
				Salaries, Wages and Allowances, .	2,943	11	8
				Travelling, .	527	1	3
				Incidental Expenses, .	55	15	7
				Congested Districts Board—Grant in Aid, 62 & 63 Vic., cap. 18, s. 5, and 9 Edw. 7, cap. 42, s. 49, .	169,759	0	9
				Tobacco Growing Experiments (Grant in Aid), .	6,369	0	0
				Forestry Operations, .	5,797	2	0
				Improvement of Horse Breeding, .	3,850	0	0
				Afforestation; Purchase of Areas, .	472	19	2
				Purchase of Dredging Plant, .	4,245	0	0
				Agricultural Research and Advisory Work, .	2,400	0	0
					439,465	4	1
				Balances on 31st March, 1912, .	7,426	4	8
Total, .	446,691	8	9	Total, .	446,691	8	9

SUSPENSE ACCOUNTS.

	Balance on 1st April, 1911.			Receipts in 1911-1912.			Payments in 1911-1912.			Balance on 31st March, 1912.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Purchase of Specimens for Museum (Grant in Aid Fund)	673	13	4	2,300	0	0	2,257	4	10	716	8	6
Purchase of Books for National Library (Grant in Aid Fund)	59	15	11	1,300	0	0	1,259	16	5	99	19	6
Royal College of Science—Purchase of Specimens, Books, Apparatus for Laboratories, &c. (Grant in Aid Fund)	10,563	4	8	13,875	0	0	5,208	9	0	19,229	15	8
Tobacco Growing Experiments (Grant in Aid Fund)	6,210	0	0	6,000	0	0	4,353	18	9	7,856	1	3
His Majesty's Stationary Office,	2	7	9	24	16	4	23	9	10	3	14	3
Local science and Art Scholarships and Exhibitions,	30	0	0	235	5	0	265	5	0	—		
Examination fees—South Kensington,	—			163	14	0	163	14	0	—		
Students' deposits—Royal College of Science,	53	13	9	20	0	0	10	0	0	63	13	9
Development Fund Account,	786	1	1	17,637	15	5	17,153	9	2	1,260	7	4
General,	—			191	12	3	182	0	7	9	11	8
Total,	18,378	16	6	41,738	3	0	30,877	7	7	29,239	11	11

GENERAL CATTLE DISEASES FUND (IRELAND), INCLUDING
Account of RECEIPTS and PAYMENTS in respect of the GENERAL
PNEUMONIA ACCOUNT (IRELAND), for the

RECEIPTS.			
	£	s.	d.
GENERAL CATTLE			
Balance on 1st April, 1911	11,409	0	11
Assessments on Local Authorities (57 & 58 Vict., cap. 57, s. 71)	15,701	9	10
Proportion of Fines,	409	10	6
	16,111	0	4
	27,520	1	3
CATTLE PLEURO-PNEUMONIA ACCOUNT FOR			
Balance on 1st April, 1911			NIL.
Parliamentary Grant-in-Aid of the Account, under the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57, s. 73), for general expenses, including special expenditure for the protection of im- ported Cattle,	100	0	0
Parliamentary Grant-in-Aid of the Account, for the costs of the execution of the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57, s. 73), as respects Swine Fever,	10,000	0	0
Parliamentary Grant-in-Aid of the Account, in respect of expenses in connection with the suppression of Rabies,	100	0	0
	10,200	0	0
Salvage of carcases of Slaughtered Swine	2,219	16	11
Transferred from the General Cattle Diseases Fund (57 and 58 Vict., c. 57, section 73 (3)),	5,509	12	7
Total,	17,929	9	6

THE CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND.

CATTLE DISEASES FUND (IRELAND), including the CATTLE PLEURO-
Year ended 31st March, 1912.

PAYMENTS.		£	s.	d.	£	s.	d.
DISEASES FUND (IRELAND).							
Recompenses to Local Authorities (57 and 58 Vict., c. 57, sec. 73)		8,190	14	0			
Fees,		49	13	6			
Travelling Expenses,		39	15	10			
Miscellaneous Expenses,		255	14	2			
					8,535	17	0
Transferred to Cattle Pleuro-Pneumonia Account for Ireland (57 and 58 Vict., c. 57, sec. 73 (3)).					5,509	12	7
Balance on 31st March, 1912					13,474	11	2
					<u>27,529</u>	<u>1</u>	<u>3</u>
IRELAND (PART OF THE GENERAL CATTLE DISEASES FUND).							
General Expenses—							
Salaries (including the pay of the Staff employed in cleansing, disinfection, branding, &c.),		6,639	18	3			
Fees,		247	5	0			
Travelling Expenses,		2,476	19	9			
Compensation to owners of slaughtered Swine,		7,482	7	0			
Miscellaneous (including the cost of requisites for cleansing and disinfection, and casual labour in killing, burying, branding and removal of animals, and other petty expenses),		881	3	9			
					17,927	13	9
Rabies Expenses—							
Salaries and Fees,		—					
Travelling,		1	14	2			
Miscellaneous Expenses,		1	7				
					1	15	9
Balance on 31st March, 1912—							NB.
Total,					<u>17,929</u>	<u>9</u>	<u>8</u>

[Fund administered by the Department, in concurrence with the as regards certain special sums mentioned in Section 16 of the Act Industries, and Technical Instruction; Agriculture and Technical

Account of NET RECEIPTS and PAYMENTS by the Department in re-

Section of Act, 62 & 63 Vict., c. 50	RECEIPTS.			
		£	s.	d.
	Balance on 1st April, 1911,	49,416	7	10
	Parliamentary Grants—			
15 (d.)	Sum payable as an equivalent for the Salaries attached to Judgeships abolished, &c., in pursuance of the Supreme Court of Judicature (Ireland) (No. 2) Act, 1897, 60 and 61 Vict., c. 66,	12,000	0	0
15 (f.)	Sum representing the amount of expenses formerly paid out of Parliamentary Grants in connexion with instruction given in Ireland in Agriculture, exclusive of such instruction given in Elementary National Schools,	6,000	0	0
—	Grant in Aid under Sec. 49 of the Irish Land Act, 1909, 9 Edw. 7, c. 42,	19,000	0	0
	Local Taxation (Ireland) Account—			
15 (a.)	Sum formerly payable to the Commissioners of National Education under the Local Taxation (Customs and Excise) Act, 1890, 53 and 54 Vict., c. 60, sec. 3,	73,000	0	0
—	Sum payable under the Agriculture and Technical Instruction (Ireland) (No. 2) Act, 1902, 3 Edw. VII., c. 33,	5,000	0	0
15 (b.)	Irish Church Temporalities Fund—Annual sum payable,	70,000	0	0
15 (c.)	Sea and Coast Fisheries Fund—54 and 55 Vict., c. 43, s. 35 (5), Loans Repayments, &c.,	5,496	18	0
—	Interest on Securities and on Moneys deposited,	5,498	15	0
—	Proceeds of Sale of Securities,	26,906	5	0
—	Contribution from Ireland Development Grant (Grant in Aid), 3 Edw. VII., c. 23, for the purposes of Technical Instruction,	7,000	0	0
—	Agricultural Loans (Repayments),	12,296	10	4
—	Marine Works,	554	17	2
—	Insurance of Live Stock,	8	2	8
	Total,	£298,177	16	0

FUND.

Agricultural Board and the Board of Technical Instruction (except a, b, d, e, f), for the purposes of Agriculture, Fisheries and other Instruction (Ireland) Act, 1899, 62 & 63 Vict., ch. 50, and other Acts.]

spect of the ENDOWMENT FUND for the Year ended 31st March, 1912.

Section of Act 62 & 63 Vict., c. 50.	PAYMENTS.			
		£	s	d.
16 1 (b.)	Purchasing and stocking additional land, and providing suitable buildings, fittings and appliances for the Munster Institution, Grants sanctioned with the concurrence of the Board of Technical Instruction—	524	12	6
" (c.) i.	County Boroughs,	28,301	13	0
" (c.) ii.	Elsewhere than County Boroughs and making inquiries and collecting, &c., information for the purposes of Technical Instruction,	45,095	10	2
—	Ireland Development Grant: Grant in Aid for the purposes of Technical Instruction,	12,083	8	2
16-1 (d.)	Sea Fisheries,	13,801	10	10
16 (e.)	Sea and Coast Fisheries Fund, 54 and 55 Vict., c. 48 (Advances),	14,304	19	7
16 1 (e.)	Superannuation of Officers transferred from National Education Office,	544	13	0
" (f.)	Travelling and Subsistence of Members of the Council and Boards,	500	12	2
—	Dunraven Scholarship Fund,	96	10	10
—	Suspense account,	3	10	0
16 1 (g.)	Grants sanctioned with the concurrence of the Agricultural Board—			
	Agriculture and other Rural Industries (including Expenses incurred under Section 17)—			
	Agricultural Instruction:			
	Albert Agricultural College,	5,426	19	1
	Munster Institute,	1,854	12	5
	Athlone Agricultural Station	1,255	10	7
	Ballyhaise do.,	2,296	5	1
	Clonekilly do.,	1,350	11	5
	Ulster Dairy School,	3,034	9	1
	Agricultural Schools and Classes,	19,512	14	9
	Royal College of Science,	1,243	2	9
	Itinerant Instruction,	7,781	10	4
	Pioneer Lectures, Judging of Farms, &c.,	1,380	18	6
	Forestry,	1,557	16	2
	Improvement of Live Stock,	5,485	15	2
	Special Assistance to Shows and Agricultural Associations,	632	17	9
	Votes to County Committees:			
	Live Stock Schemes,	12,270	6	7
	Other Agricultural Schemes,	20,165	18	3
	Shows,	3,772	11	8
	General Administration,	6,629	6	2
	Improvement of Butter Industry,	4,390	1	11
	Agricultural Loans (Advances),	12,642	3	8
	Connected Districts Schemes,	17,634	14	3
	Special Investigations,	7,092	6	4
	Rural and other Industries,	2,457	9	1
	Inland Fisheries,	3,548	0	8
	Travelling of Members of Special Committees,	64	6	3
	Expenses in connection with Fertilisers and Feeding Stuff, Food and Drugs, and other Acts,	3,009	9	9
	Interests of Irish Agricultural Produce	2,313	2	9
	Marketing of Irish Produce,	1,331	1	11
	Miscellaneous Expenses,	6,672	2	8
		266,424	12	0
	BALANCE ON 31st MARCH, 1912,	32,763	4	0
	Total,	299,187	16	0

* This sum includes the expenditure of a Grant of £10,600 from the Agricultural Board for Manual Instruction and the teaching of Domestic Economy in Rural Districts.

**DETAILS OF SPECIAL INVESTIGATIONS (ENDOWMENT FUND) for the
Year ended 31st March, 1912.**

	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Flax Scheme,	1,990 5 3	325 13 3	1,664 12 0
Feeding Experiments (pigs, cattle, &c.),	57 7 1	—	57 7 1
Cheese-making Experiments	170 17 6	—	170 17 6
Poultry Industry,	1,387 8 4	945 17 0	441 11 4
Potatoes,	345 16 7	—	345 16 7
Horticulture,	784 2 5	—	784 2 5
Tobacco Growing,	584 15 1	—	584 15 1
Seed Testing,	908 9 6	443 19 4	464 10 2
Implements for Experiments,	67 18 11	—	67 18 11
Cereal Experiments	1,972 18 6	900 0 0	1,072 18 6
Sugar Beet Trials,	6 4 7	—	6 4 7
Winter Dairying Scheme, . .	527 5 11	—	527 5 11
Cattle Mortality (Diseases in Farm Animals; Royal Vet- erinary College Grant; Warble Experiments), . . .	721 12 6	300 3 0	421 9 6
Technical Aid to Industries (Dead Meat Trade, &c.), . .	356 11 2	—	356 11 2
Nitrogen Tests, &c.	36 5 7	—	36 5 7
Total,	9,917 18 11	2,915 12 7	7,002 6 4

**DETAILS OF MISCELLANEOUS EXPENSES (ENDOWMENT FUND) for the
Year ended 31st March, 1912.**

Sub-Head.	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
<i>Journal</i> and Leaflets,	269 8 2	20 3 4	249 4 10
Technical and Clerical As- sistance,	3,398 6 7	—	3,398 6 7
Transit of Produce,	162 8 9	—	162 8 9
Motor Service,	257 14 2	—	257 14 2
Circulating School Exhibits,	358 6 1	0 3 6	358 2 7
Erection of Notice Boards, carriage of leaflets, &c., . .	4 17 11	—	4 17 11
Railway, &c., Rates inquiries, Travelling of candidates tes- ted for appointments, . . .	492 15 6	—	492 15 6
Libraries,	85 0 11	—	85 0 11
Law Charges (execution of loan bonds, &c.),	17 15 2	—	17 15 2
Employer's Liability In- surance,	51 18 6	—	51 18 6
Ul Bressail Exhibition, . . .	103 9 1	29 10 4	73 18 9
General (Expenses in connec- tion with visit of Canadian Royal Commission on In- dustrial Training; Office requisites, &c.),	465 14 8	13 7 4	452 7 4
	67 19 6	0 7 10	67 11 8
Total,	5,735 15 0	63 12 4	5,672 2 8

SUMMARY OF LOAN ACCOUNTS on 31st March, 1912

Nature of Loans.	Loans outstanding on 31st March, 1911.			Loans issued in 1911-12.			Principal repaid in 1911-12.	Interest received in 1911-12.	Loans outstanding on 31st March, 1912				
	No.	Amount.		No.	Amount.				No.	Amount.			
		£	s. d.		£	s. d.				£	s. d.		
For the purchase of Bulls,	390	7,383	4 7	188	4,803	11 4	4,594	4 3	163	17 4	113	7,591	11 8
For the purchase of Stallions,	103	6,443	16 7	21	1,888	6 8	1,903	12 3	137	2 10	111	6,322	11 0
To Agricultural Credit Societies,	118	5,415	15 7	3	181	0 0	1,054	13 1	248	2 8	104	7,448	6 11
For the erection of Fencing,	232	3,220	2 3	110	2,054	0 0	617	14 0	103	10 3	328	4,656	8 3
For the erection of Pasteurising Plant in Creameries,	1	152	0 0	—	—	—	—	—	—	—	—	—	—
For Hand Separators,	80	378	10 2	16	132	2 6	229	9 11	11	16 10	62	231	2 9
For Horse Spraying Machines,	90	380	14 9	25	218	11 2	285	12 1	11	1 1	47	313	13 10
For Industrial Development,	2	543	1 0	—	—	—	21	11 0	1	8 4	2	521	10 0
For erection of Village Halls,	4	1,512	10 0	2	450	0 0	152	10 0	24	2 5	6	1,610	0 0
For repairing & equipping Scotch Mills,	2	144	0 0	2	400	0 0	52	0 0	8	5 1	4	492	0 0
For purchase of Threshing Machine,	—	—	—	1	9	0 0	—	—	—	—	1	9	0 0
Total,	1029	23,773	11 11	368	9,935	11 8	8,811	6 7	714	4 10	1077	29,418	4 5

SEA AND COAST FISHERIES FUND LOANS:

Amount of Promissory Notes outstanding on 31st March, 1912, £29,010 5 5 representing 561 loans.

BULLS SOLD UNDER SPECIAL SCHEME FOR CONGESTED DISTRICTS:

Maximum sum outstanding for 59 bulls sold, £787 0 0

reducible if certain conditions are complied with to £320 0 0

LOANS WRITTEN OFF AS IRRECOVERABLE IN THE YEAR:

Agricultural Credit Societies	£112	19	7	Including Interest
Erection of Pasteurising Plant in Creameries	175	12	0	" "
Sea and Coast Fisheries Fund Loans	3	2	6	" "
	£291	14	1	

STATEMENT OF SECURITIES HELD ON 31st MARCH, 1912.

FUND FOR WHICH SECURITY IS HELD.

	£	s.	d.	
Local Loans Stock	120,000	0	0	Endowment
Guaranteed Land Stock (Mature)	67,852	12	4	ditto.
Guaranteed 2½ % Stock, 1903	38,593	19	1	ditto.
Consols	20,000	0	0	ditto.
Total	£246,446	11	5	

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

COUNCIL AND BOARDS, 1912.

I.—COUNCIL OF AGRICULTURE.

Arranged in Alphabetical Order according to Provinces.

II.—COUNCIL OF AGRICULTURE.

Arranged according to Counties, &c.

III.—AGRICULTURAL BOARD.

IV.—BOARD OF TECHNICAL INSTRUCTION.

V.—CONSULTATIVE COMMITTEE OF EDUCATION.

I.—COUNCIL OF AGRICULTURE, 1912.

[104 Members, including the President and Vice-President.]

Arranged in Alphabetical Order according to Provinces.

LEINSTER (36 Members).

Bolger, John, J.P. Ferns, Co. Wexford.

Briscoe, Algernon T. F., J.P. Curristown House, Killucan, Co. Westmeath.

Butler, John, J.P. Minauns, Callan, Co. Kilkenny.

Byrne, Thomas J., J.P. Rossmakea, Dundalk, Co. Louth.

Carew, Thomas M. Kildangan, Kinnegad, Co. Westmeath.

Carey, Patrick J., J.P. Tomanierin, Aughrim, Co. Wicklow.

Cogan, Denis J. 115 Thomas Street, Dublin.

Dolan, Joseph. Gaulstown, Dunleer, Co. Louth.

Dooley, James G. Hoodsgrove, Rosbercon, New Ross, Co. Wexford.

Downes, Robert. Russellstown, Mullingar, Co. Westmeath.

Esmonde, Sir Thomas H. Grattan, Bart., M.P. Ballynastragh, Gorey, Co. Wexford.

Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath.

Farrell, James P., M.P. Longford.

Ffrench, Peter, J.P., M.P. Bridgetown, Wexford.

Field, William, M.P. Blackrock, Co. Dublin.

Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin.

Honlon, Patrick. Grangeforth, Carlow.

Haran, Michael J., J.P. Mile Tree House, Birr, King's County.

Kavanagh, Walter M'M., J.P., D.L. Borris House, Borris, Co. Carlow.

Kennedy, Patrick J., J.P. Rathcore House, Enfield, Co. Meath.
 Loftus, Captain John E. B., J.P. Mount Loftus, Goresbridge,
 Co. Kilkenny.
 McCarthy, James, J.P. Newfoundwell, Drogheda, Co. Louth.
 McMahon, Arthur, J.P. Colt Studfarm, Abbeyleix, Queen's
 County.
 Massereene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P.
 Oriel Temple, Collon, Co. Louth.
 Meehan, Patrick A., J.P., M.P. Maryborough, Queen's County.
 Minch, Matthew J., J.P. Rockfield House, Athy, Co. Kildare.
 Mooney, Joseph, J.P. Cabra Lodge, Cabra, Co. Dublin.
 Moore, Mathew. Garr, Rhode, Edenderry, King's County.
 Murphy, George F., J.P. The Grange, Dunsany, Co. Meath.
 O'Neill, Patrick J., J.P. Kinsealy House, Malahide, Co. Dublin.
 Peacocke, Charles H., J.P. Belmont, Wexford.
 Reynolds, Henry. Ballinalee, Edgeworthstown, Co. Longford.
 Ronaldson, William R. Barn Hall, Leixlip, Co. Kildare.
 Ross, James, J.P. Newport, Lenamore, Co. Longford.
 Wallace, Hugh. 23 Westmoreland Street, Dublin.
 Wolfe, George, J.P. Forenaughts, Naas, Co. Kildare.

ULSTER (27 Members).

Baillie, William. Martray Manor, Ballygawley, Co. Tyrone.
 Barbour, Frank. 4 Rosemount Terrace, Dunmurry, Co.
 Antrim.
 Barrie, Hugh T., J.P., M.P. Manor House, Coleraine, Co. Lon-
 donderry.
 Boyd, R. N. Carntall, Carnmoney, Co. Antrim.
 Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co.
 Londonderry.
 Crumley, Patrick, J.P., M.P. Enniskillen, Co. Fermanagh.
 Davison, Joseph. Bellaghy, Co. Londonderry.
 Dunlevy, James. Bay View, Donegal.
 Gallagher, Edward, J.P. Lansdowne House, Strabane, Co.
 Tyrone.
 Keenan, John, J.P. Leitrim, Castledawson, Co. Londonderry.
 Lynch, Frank J., J.P. Ballyjamesduff, Co. Cavan.
 Macatee, Thomas, J.P. Curryskiskin House, Ballymoney, Co.
 Antrim.
 McCance, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim.
 McClure, Thomas A., J.P. Rose Lodge, Killylea, Co. Armagh.
 McGlynn, The Rt. Rev. Monsignor, P.P., V.G. Parochial House,
 Stranorlar, Co. Donegal.
 McKenna, T. P., J.P. Mullagh, Kells.
 Montgomery, H. de F., J.P., D.L. Blessingbourne, Fivemile-
 town, Co. Tyrone.
 Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone.
 Patrick, Captain John, J.P. Dunminning, Glarryford, Co.
 Antrim.

Porter, John Porter, J.P., D.L. Belleisle, Lisbellaw, Co. Fermanagh.
 Reade, Robert H., J.P., D.L. Wilmont, Dunmurry, Co. Antrim.
 Sharman-Crawford, Colonel R. G., J.P., D.L. Crawfordsburn, Co. Down.
 Sheils, Michael, J.P. Springhill Farm, Bangor, Co. Down.
 Sinton, Alfred H. Laurel Vale, Tandragee, Co. Armagh.
 Smyth, William, J.P. Brookfield, Banbridge, Co. Down.
 Toal, Thomas, J.P. Smithboro', Monaghan.
 Ua Ciarain, Rev. Lorcan, P.P. Rockecorry, Co. Monaghan.

MUNSTER (24 Members).

Ahern, Michael. 71 Summer Hill, St. Luke's, Cork.
 Bourke, John. Duckstown, Rathkeale, Co. Limerick.
 Brasier-Creagh, Langley, J.P. Streamhill, Doneraile, Co. Cork.
 Coghlan, Captain William C., J.P. Dromina, Rossduff, Co. Waterford.
 Cummins, Edmund, J.P. Brookhill, Fethard, Co. Tipperary.
 Duggan, Thomas, J.P. The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.
 Dwyer, Joseph, J.P. Barnagree House, Roscrea, Co. Tipperary.
 Gubbins, William R., J.P. Cush House, Kilfinane, Co. Limerick.
 Hogan, Patrick J., J.P. Coolreagh, Bodyke, Co. Clare.
 Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork.
 M'Cowen, William Henry. Parknadoon, Tralee, Co. Kerry.
 M'Donald, William, J.P. Laharan, Minane Bridge, Carrigaline, Co. Cork.
 Mescal, Michael, J.P. Dromelihiy, Cooraclare, Co. Clare.
 Moclair, Patrick. Ballinree House, Cashel, Co. Tipperary.
 Monteagle, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick.
 Nolan, Michael J., J.P. Moyvane House, Newtownsandes, Co. Kerry.
 Nugent, Edmond, J.P. Ballymacarbery, Clonmel, Co. Tipperary.
 O'Gorman, David Leo. Janeville, Fermoy, Co. Cork.
 O'Gorman, George, J.P. Kilkneedan, Ballyhar, Co. Kerry.
 O'Mara, Stephen. Strand House, Limerick.
 O'Mullane, Timothy. Riversdale, Lombardstown, Co. Cork.
 Power, Thomas. Dungarvan, Co. Waterford.
 Ryan, Hugh P. Roskeen, Thurles, Co. Tipperary.
 Slattery, Michael, J.P. Killerk, Lisronagh, Clonmel, Co. Tipperary.

CONNACHT (15 Members).

Clonbrock, The Right Hon. Lord, K.P., H.M.L. Clonbrock, Ahascragh, Co. Galway.
 Conroy, Patrick D., J.P. Garafia, Rosmuck, Co. Galway.

- Costello, P. J., J.P. Cloghansmore House, Cloghans Hill, Tuam,
Co. Galway.
- Daly, Very Rev. Canon, D.D., P.P. Lavagh, Ballymote, Co.
Sligo.
- Digges, Rev. Joseph G., M.A. Clooncahir, Lough Rynn R.S.O.,
Co. Leitrim.
- Flynn, Rev. Charles, P.P., V.F. Ballinamore, Co. Leitrim.
- Galvin, John. Mount Talbot, Roscommon.
- Gore-Booth, Sir Josslyn, Bart., J.P., D.L. Lissadell, Sligo.
- Griffin, Thomas G., J.P. Gurteen, Ballinasloe, Co. Galway.
- MacGuire, James P. Ruskey, Dromod, Co. Leitrim.
- Manly, Rev. P. J., C.C. Carrick-on-Shannon, Co. Leitrim.
- Morrin, Daniel. Foxford, Co. Mayo.
- Mulligan, Rev. Philip J., P.P. Carnacastle, Ballaghaderreen, Co.
Mayo.
- O'Dowd, John, J.P., M.P. Dathi House, Bunnanadden, Co.
Sligo.
- Wallace, Robert P., J.P. Clonmorris, Dromod, Co. Leitrim.

II.—COUNCIL OF AGRICULTURE, 1912.

[104 Members, including the President and Vice-President.]

Arranged according to Counties, &c.

LEINSTER (36 Members).

Members appointed by County Councils.

- Carlow*.—Hanlon, Patrick. Grangeforth, Carlow.
Kavanagh, Walter M'M., J.P., D.L. Borris House,
Borris, Co. Carlow.
- Dublin*.—Mooney, Joseph, J.P. Cabra Lodge, Cabra, Co.
Dublin.
- O'Neill, Patrick J., J.P. Kinsealy House, Malahide,
Co. Dublin..
- Kildare*.—Minch, Matthew J., J.P. Rockfield House, Athy, Co.
Kildare.
- Wolfe, George, J.P. Forenaughts, Naas, Co. Kildare.
- Kilkenny*.—Butler, John, J.P. Minauns, Callan, Co. Kilkenny.
Dooley, James G. Hoodsgrove, Rosbercon, New
Ross, Co. Wexford.
- King's County*.—Horan, Michael J., J.P. Mile Tree House, Birr,
King's County.
- Moore, Mathew. Garr, Rhode, Edenderry,
King's County.
- Longford*.—Reynolds, Henry. Ballinallee, Edeworthstown, Co.
Longford.
- Ross, James, J.P. Newport, Lenamore, Co. Long-
ford.

LEINSTER—Continued.**Members appointed by County Councils.—Continued.**

- Louth.*—Dolan, Joseph. Gaulstown, Dunleer, Co. Louth.
 M'Carthy, James, J.P. Newfoundwell, Drogheda, Co. Louth.
- Meath.*—Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath.
 Kennedy, Patrick J., J.P. Rathcore House, Enfield, Co. Meath.
- Queen's County.*—McMahon, Arthur, J.P. Colt Studfarm, Aybyleix, Queen's County.
 Meehan, Patrick A., J.P., M.P., Maryborough, Queen's County.
- Westmeath.*—Briscoe, Algernon T. F., J.P. Curristown House, Killucan, Co. Westmeath.
 Downes, Robert. Russelstown, Mullingar, Co. Westmeath.
- Wexford.*—Bolger, John, J.P. Ferns, Co. Wexford.
 Peacocke, Charles H., J.P. Belmont, Wexford.
- Wicklow.*—Carey, Patrick J., J.P. Tomanierin, Aughrim, Co. Wicklow.
 Cogan, Denis J. 115 Thomas Street, Dublin.

Members appointed by the Department.

- Byrne, Thomas J., J.P. Rossmakea, Dundalk, Co. Louth.
 Carew, Thomas M. Kildangan, Kinnegad, Co. Westmeath.
 Esmonde, Sir Thomas H. Grattan, Bart., M.P. Ballynastragh, Gorey, Co. Wexford.
- Farrell, James P., M.P. Longford.
- Ffrench, Peter, J.P., M.P. Bridgetown, Wexford.
- Field, William, M.P. Blackrock, Co. Dublin.
- Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin.
- Loftus, Captain John E. B., J.P. Mount Loftus, Goresbridge, Co. Kilkenny.
- Massereene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P. Oriel Temple, Collon, Co. Louth.
- Murphy, George F., J.P. The Grange, Dunsany, Co. Meath.
- Ronaldson, William R. Barn Hall, Leixlip, Co. Kildare.
- Wallace, Hugh. 23 Westmoreland Street, Dublin.

ULSTER (27 Members).**Members appointed by County Councils.**

- Antrim.*—M'Cance, J. S. F., J.P. Woodbourne, Danmurry, Co. Antrim.
 Patrick, Captain John, J.P. Dunminning, Glarryford, Co. Antrim.

ULSTER—Continued.

Members appointed by County Councils—Continued.

- Armagh*.—M'Clure, Thomas A., J.P. Rose Lodge, Killylea, Co. Armagh.
 Sinton, Alfred H. Laurel Vale, Tandragee, Co. Armagh.
- Cavan*.—Lynch, Frank J., J.P. Ballyjamesduff, Co. Cavan.
 M'Kenna, T. P., J.P. Mullagh, Kells.
- Donegal*.—Dunlevy, James. Bay View, Donegal.
 M'Glynn, The Rt. Rev. Monsignor, P.P., V.G. Parochial House, Stranorlar, Co. Donegal.
- Down*.—Sharman-Crawford, Col. R. G., J.P., D.L. Crawfordsburn, Co. Down.
 Smyth, William, J.P. Brookfield, Banbridge, Co. Down.
- Fermanagh*.—Crumley, Patrick, J.P., M.P. Enniskillen, Co. Fermanagh.
 Porter, John Porter, J.P., D.L. Belleisle, Lisbellaw, Co. Fermanagh.
- Londonderry*.—Barrie, Hugh T., J.P., M.P. Manor House, Coleraine, Co. Londonderry.
 Keenan, John, J.P. Leitrim, Castledawson, Co. Londonderry.
- Monaghan*.—Toal, Thomas, J.P. Smithboro', Monaghan.
 Ua Ciarain, Rev. Lorcan, P.P. Rockcorry, Co. Monaghan.
- Tyrone*.—Montgomery, H. de F., J.P., D.L. Blessingbourne, Fivemiletown, Co. Tyrone.
 Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone.

Members appointed by the Department:

- Bailie, William. Martray Manor, Ballygawley, Co. Tyrone.
- Barbour, Frank. 4 Rosemount Terrace, Dunmurry, Co. Antrim.
- Boyd, R. N. Carnall, Carnmoney, Co. Antrim.
- Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co. Londonderry.
- Davison, Joseph. Bellaghy, Co. Londonderry.
- Gallagher, Edward, J.P. Lansdowne House, Strabane, Co. Tyrone.
- Macafee, Thomas, J.P. Currysiskan House, Ballymoney, Co. Antrim.
- Reade, Robert H., J.P., D.L. Wilmont, Dunmurry, Co. Antrim.
- Sheils, Michael, J.P. Springhill Farm, Bangor, Co. Down.

MUNSTER (24 Members).**Members appointed by County Councils.**

- Clare.* Hogan, Patrick J., J.P. Coolreagh, Bodyke, Co. Clare.
Mescal, Michael, J.P. Dromeliy, Cooraclare, Co. Clare.
- Cork.*—Ahern, Michael. 71 Summer Hill, St. Luke's, Cork.
Brasier-Creagh, Langley, J.P. Streamhill, Doneraile, Co. Cork.
M'Donald, William, J.P. Laharan, Minane Bridge, Carrigaline, Co. Cork.
O'Mullane, Timothy. Riversdale, Lombardstown, Co. Cork.
- Kerry.*—Nolan, Michael J., J.P. Moyvane House, Newtownsandes, Co. Kerry.
O'Gorman, George, Kilkneedan, Ballyhar, Co. Kerry.
- Limerick.*—Bourke, John. Duckstown, Rathkeale, Co. Limerick.
Gubbins, William R., J.P. Cush House, Kilfinane, Co. Limerick.
- Tipperary, N.R.*—Duggan, Thomas, J.P. The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.
Ryan, Hugh P. Roskeen, Thurles, Co. Tipperary.
- Tipperary, S.R.*—Moclair, Patrick. Ballinree House, Cashel, Co. Tipperary.
Slattery, Michael, J.P. Killerk, Lisronagh, Clonmel, Co. Tipperary.
- Waterford.*—Nugent, Edmond, J.P. Ballymacarbery, Clonmel, Co. Tipperary.
Power, Thomas. Dungarvan, Co. Waterford.

Members appointed by the Department.

- Coghlan, Captain Wm. C., J.P. Dromina, Rossduff, Co. Waterford.
- Cummins, Edmund, J.P. Brookhill, Fethard, Co. Tipperary.
Dwyer, Joseph, J.P. Barnagree House, Roscrea, Co. Tipperary.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross.—Bishop's House, Skibbereen, Co. Cork.
- M'Cowen, William Henry. Parknadoon, Tralee, Co. Kerry.
Monteagle, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick.
- O'Gorman, David Leo. Janeville, Fermoy, Co. Cork.
O'Mara, Stephen. Strand House, Limerick.

CONNACHT (16 Members).**Members appointed by County Councils.**

- Galway.*—Conroy, Patrick D., J.P. Garafin, Rosmuck, Co. Galway.
Griffin, Thomas G. Gurteen, Ballinasloe, Co. Galway.

CONNACHT—Continued.

Members appointed by County Councils—Continued.

- Leitrim*.—Flynn, Rev. Charles, P.P., V.F. Ballinamore, Co. Leitrim.
 Manly, Rev. P. J., C.C. Carrick-on-Shannon, Co. Leitrim.
- Mayo*.—Costello, P. J., J.P. Cloghansmore House, Cloghans Hill, Tuam, Co. Galway.
 Morrin, Daniel. Foxford, Co. Mayo.
- Roscommon*.—Galvin, John. Mount Talbot, Roscommon.
 MacGuire, James P. Ruskey, Dromod, Co. Leitrim.
- Sligo*.—Daly, Very Rev. Canon, D.D., P.P. Lavagh, Ballymote Co. Sligo.
 O'Dowd, John, J.P., M.P. Dathi House, Bunnanadden, Co. Sligo.

Members appointed by the Department.

- Clonbrock, The Right Hon. Lord, K.P., H.M.L. Clonbrock Ahascragh, Co. Galway.
- Digges, Rev. Joseph G., M.A. Clooncahir, Lough Rynn R.S.O., Co. Leitrim.
- Gore-Booth, Sir Josslyn, Bart., J.P., D.L. Lissadell, Sligo.
- Mulligan, Rev. Philip J., P.P. Carracastle, Ballaghaderreen, Co. Mayo.
- Wallace, Robert P., J.P. Clonmorris, Dromod, Co. Leitrim.

III.—AGRICULTURAL BOARD.

(14 Members*).

- Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co. Londonderry. *Appointed by the Department.*
- Dale, Alderman Henry, J.P. Riverview House, Sunday's Well, Cork. *Appointed by the Department.*
- Daly, Very Rev. Canon, D.D., P.P. Lavagh, Ballymote, Co. Sligo. *Appointed by Connacht Provincial Committee.*
- Downes, Robert. Russellstown, Mullingar. *Appointed by Leinster Provincial Committee.*
- Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath. *Appointed by the Department.*
- Gore-Booth, Sir Josslyn, Bart., D.L. Lissadell, Sligo. *Appointed by the Department.*
- Healy, His Grace The Most Rev. John, D.D., Lord Archbishop of Tuam. St. Jarlath's, Tuam, Co. Galway. *Appointed by Connacht Provincial Committee.*

* By section 24 (2) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the President and Vice-President of the Department are *ex-officio* Members of the Board.

AGRICULTURAL BOARD—Continued.

- Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork. *Appointed by Munster Provincial Committee.*
- M'Cance, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim. *Appointed by Ulster Provincial Committee.*
- Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone. *Appointed by Ulster Provincial Committee.*
- O'Gorman, David Leo. Janeville, Fermoy, Co. Cork. *Appointed by Munster Provincial Committee.*
- O'Neill, Patrick J., J.P. Kinsealy House, Malahide, Co. Dublin. *Appointed by Leinster Provincial Committee.*

IV.—BOARD OF TECHNICAL INSTRUCTION

(23 Members.*)

- Barbour, Frank. 4 Rosemount Terrace, Dunmurry, Co. Antrim. *Appointed by Ulster Provincial Committee.*
- Clancy, Most Rev. John, D.D., Lord Bishop of Elphin (Died October, 1912†). St. Mary's, Sligo. *Appointed by Connacht Provincial Committee.*
- Crozier, James, J.P., V.S. Montpelier House, Phoenix Park, Dublin. *Appointed by Dublin County Borough Council.*
- Dickson, Alexander. 15 Parliament Street, Dublin. *Appointed by Dublin County Borough Council.*
- Dunn, Christopher J., J.P. Hotel Metropole, Cork. *Appointed by the Department.*
- Evans, Rev. Henry, D.D., M.R.I.A., F.I.H. St. Helen's, Blackrock, Co. Dublin. *Appointed by Commissioners of National Education.*
- Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin. *Appointed by Leinster Provincial Committee.*
- Henderson, Sir James, J.P., D.L. Oakley House, Windsor Park, Belfast. *Appointed by the Department.*
- Johnston, Sir John Barr, J.P. Crawford Square, Londonderry. *Appointed by Londonderry County Borough Council.*
- Macartney, William, J.P. 33 Cliftonville Road, Belfast. *Appointed by Belfast County Borough Council.*
- M'Clelland, John A., M.A., D.Sc., F.R.S. Rostrevor, Orwell Road, Rathgar, Co. Dublin. *Appointed by the Department.*
- M'Donogh, Martin, J.P. Galway. *Appointed by the Department.*

* By Section 24 (2) of the Agricultural and Technical Instruction (Ireland) Act 1899, the President and Vice-President of the Department are *ex-officio* Members of the Board.

† At a Meeting of the Connacht Provincial Committee of the Council of Agriculture held on 4th December, 1912, Mr. James P. MacGuire of Ruskey, Co. Roscommon, was appointed to fill the vacancy on the Board caused by the death of the Most Rev. Dr. Clancy.

Mercier, Alderman Samuel T., J.P. 2 Mount Clifton, Cliftonville Road, Belfast. *Appointed by Belfast County Borough Council.*

O Ceallaigh, Seaghan T. 8 Belvidere Avenue, Dublin. *Appointed by Dublin County Borough Council.*

BOARD OF TECHNICAL INSTRUCTION—Continued.

Power, Thomas. Dungarvan, Co. Waterford. *Appointed by Munster Provincial Committee.*

Ryan, Right Worshipful Councillor Timothy, Mayor of Limerick. 126 O'Connell Street, Limerick. *Appointed by Limerick County Borough Council.*

Sheehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore. Bishop's House, John's Hill, Waterford. *Appointed by Waterford County Borough Council.*

Sisk, Richard. 2 Evergreen Villas, Evergreen Road, Cork. *Appointed by Cork County Borough Council.*

Starkie, William J. M., M.A., Litt.D., LL.D. Tyrone House, Marlborough Street, Dublin. *Appointed by Intermediate Education Board.*

Taylor, Alexander. 181A Donegall Street, Belfast. *Appointed by Belfast County Borough Council.*

Wallace, William, J.P. Greenville, Blackrock, Co. Dublin. *Appointed by Joint Committee of Councils of the Co. Dublin Urban Districts.]*

V.—CONSULTATIVE COMMITTEE OF EDUCATION.

(5 Members.)

Russell, The Right Hon. T. W., P.C., M.P., Vice-President of the Department. Department of Agriculture and Technical Instruction, Dublin. *Ex-officio.*

Starkie, William J. M., M.A., Litt.D., LL.D. Tyrone House, Marlborough Street, Dublin. *Appointed by the Commissioners of National Education.*

Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin. *Appointed by the Intermediate Education Board.*

McClelland, John A., M.A., D.Sc., F.R.S. Rostrevor, Orwell Road, Rathgar, Co. Dublin. *Appointed by the Board of Technical Instruction.*

Gill, T. P. Department of Agriculture and Technical Instruction, Dublin. *Appointed by the Agricultural Board.*

AGRICULTURE

TABLE showing by Counties the Agricultural Schemes adopted tember, 1912; the amount allocated from the joint fund allocation estimated to be borne by the local rates and the

County.	Itiner- ant In- struction in Agri- culture.	Agricul- tural Classes.	Poultry.	Butter- making.	Horti- culture and Bee- keeping.	Cottage and Farm Prices.
	£	£	£	£	£	£
Antrim, . . .	595	100	410	—	209	—
Armagh, . . .	411	280	303	—	396	—
Carlow, . . .	288	50	161	72	165	—
Cavan, . . .	350	60	402	110	328	194
Clare, . . .	580	60	323	260	200	326
Cork, . . .	1,420	270	836	246	654	559
Donegal, . . .	335	120	618	140	(a) 594	620
Down, . . .	(b) 400	(c) 600	355	100	258	320
Dublin, . . .	380	30	177	—	164	50
Fermanagh, . . .	320	30	332	—	275	100
Galway, . . .	692	70	650	200	245	500
Kerry, . . .	380	100	492	184	210	135
Kildare, . . .	350	75	240	97	(c) 413	328
Kilkenny, . . .	585	(f) 180	246	124	284	142
King's, . . .	306	40	*284	82	200	120
Leltrim, . . .	310	40	290	135	186	132
Limerick, . . .	(g) 998	60	320	—	200	162
Londonderry, . . .	320	75	332	175	203	200
Longford, . . .	(h) 367	—	*267	—	195	71
Louth, . . .	345	50	364	102	212	45
Mayo, . . .	610	100	620	140	(g) 450	335
Meath, . . .	(k) 800	—	425	154	237	550
Monaghan, . . .	400	—	357	105	228	140
Queen's, . . .	320	50	*298	—	185	150
Roscommon, . . .	340	30	470	150	220	237½
Sligo, . . .	350	40	334	—	210	152
Tipperary (N.R.) . . .	345	(l) 300	260	84	215	130
Tipperary (S.R.) . . .	425	(m) 175	*310	45	223	248
Tyrone, . . .	665	240	313	105	250	250
Waterford, . . .	350	50	234	126	197	45
Westmeath, . . .	(o) 397	—	410	160	185	263½
Wexford, . . .	(p) 795	(q) 120	343	143	304	300
Wicklow, . . .	352	—	279	141	178	100
Totals, . . .	15,881	3,395	12,055	3,380	8,673	6,905

* Includes Butter-making.

(a) Includes £400 for Forestry.

(b) Includes £15 to Farmers' Institute.

(c) Includes £350 Scholarships to Antrim Farm School.

(d) Includes £250 Grant from "Henry Trust Fund."

(e) Includes £100 for Shelter Belts, £33 Grants for School Plots, and £30 for Teachers' Continuation Course.

(f) Includes £60 Scholarships for Boys at Clonakilty Agricultural Station.

(g) Includes £268 for Spl. Tillage Scheme, of which £50 is a contribution from Limerick Endowment Fund.

(h) Includes £20 for Scholarships at Ballyhaise Agricultural Station.

APPENDICES :—

by the several County Committees for the year ended 30th Sep-
for the purposes of each Scheme, and the proportions of the total
Department's contribution respectively.

Live Stock.	Sub- sidies to Shows.	Flax.	General Admin- istration, includ- ing Secretaries' salaries and expenses.	Total Allocation	Estimated Allocation as between Department's Grants and Rates		Rates raised.
					Department	Rates	
£	£	£	£	£	£	£	£
1,210	275	—	405	3,204	1,891	1,313	(s) 1,907
655	115	—	380	2,540	1,495	1,045	(s) 1,112
233	100	—	170	1,239	840	399	659
681	194	—	300	2,619	1,605	1,014	1,106
750	210	—	265	2,974	1,948	1,026	(s) 964
1,675	725	50	567	7,002	4,738	2,264	(t) 2,144
843	300	—	365	3,935	2,325	1,610	1,294
1,390	385	200	495	(d) 4,503	2,452	2,051	(s) 2,116
693	202	—	205	1,901	1,233	668	(t) 823
545	155	—	215	1,972	1,289	683	950
905	250	—	270	3,782	2,878	904	1,800
1,010	150	—	260	2,921	2,066	855	1,177
505	144	—	400	2,552	1,605	947	1,427
735	209	—	340	2,845	1,624	1,221	1,437
455	100	—	275	1,862	1,169	693	961
370	80	—	176	1,719	1,144	575	578
885	200	—	320	3,145	1,831	1,314	(t) 993
722	205	—	370	2,602	1,535	1,067	636
300	120	—	(i) 190	1,510	951	559	1,224
364	94	—	260	1,836	1,108	728	800
745	213	—	350	3,563	2,324	1,239	1,267
790	220	—	344	3,520	2,044	1,476	1,542
568	162	80	255	2,295	1,387	908	1,060
465	150	—	245	1,863	1,219	644	1,070
575	160	—	280	2,462½	1,557	905½	12,60
420	120	—	230	1,856	1,228	628	800
520	150	—	310	2,314	1,390	924	1,070
878	240	—	315	2,859	1,803	1,056	1,540
(n) 1,120	300	100	495	3,838	2,317	1,521	1,742
550	105	—	305	1,962	1,330	632	1,082
600	170	—	220	2,405½	1,586	819½	1,317
805	277	—	310	3,397	1,932	1,465	1,480
524	124	—	281	1,979	1,212	767	1,037
23,486	6,604	430	10,168	90,977	57,056	33,921	—

(i) Includes £10 for purchase of Hand Sprayers.

(j) Includes £50 for Shelter Belts.

(k) Includes £300 for Tillage Prize Scheme, and £120 for Agricultural Overseer for New Holders' Colonies.

(l) Includes £50 Scholarships for Boys and £60 Scholarships for Girls.

(m) Includes £75 Scholarships for Girls at Dundrum School.

(n) Includes £30 Special Grant from Department.

(o) Includes £87 for Bacon Curing.

(p) Includes £400 for Veterinary Dispensaries.

(r) Includes £60 for Scholarships at Clonakilty Agricultural Station.

(s) Rate 3d. in the £ } In all other cases, the rate is 1d. in the £.

(t) " 1d. " " }

RETURN showing the Number of Instructors, &c., employed in each County in connection with Agricultural Schemes during the year 1911-1912.

County.	Agriculture.	Teachers of Agricultural Classes.	Poultry-keeping only.	Poultry-keeping and Butter-making.	Butter-making only.	Horticulture only.	Horticulture and Bee-keeping.	Bee-keeping only.
Antrim, . . .	2	-	1	-	-	-	1	-
Armagh, . . .	1	1	1	-	-	-	2	-
Carlow, . . .	1	-	-	1	-	-	1	-
Cavan, . . .	1	-	1	-	1	1	-	1
Clare, . . .	2	-	1	-	2	-	1	-
Cork, . . .	4	-	2	-	2	-	3	-
Donegal, . . .	1	-	-	2	-	-	1	-
Down, . . .	1	-	-	1	-	-	1	-
Dublin, . . .	1	-	1	-	-	-	1	-
Fermanagh, . . .	1	-	1	-	-	-	1	-
Galway, . . .	2	-	-	1	1	-	1	-
Kerry, . . .	1	-	1	-	1	-	1	-
Kildare, . . .	1	-	-	1	-	-	1	-
Kilkenny, . . .	2	-	-	1	-	1	-	1
King's, . . .	1	-	-	1	1	-	1	-
Leftrim, . . .	1	-	1	-	1	-	1	-
Limerick, . . .	2	-	1	-	-	-	1	-
Londonderry, . . .	1	-	1	-	1	-	1	-
Longford, . . .	1	-	-	1	-	-	1	-
Louth, . . .	1	-	1	-	-	-	1	-
Mayo, . . .	2	-	-	1	1	-	2	-
Meath, . . .	1	-	1	-	1	-	1	-
Monaghan, . . .	1	-	1	-	1	-	1	-
Queen's, . . .	1	-	-	1	-	-	1	-
Roscommon, . . .	1	-	-	2	-	-	1	-
Sligo, . . .	1	-	1	-	-	-	1	-
Tipperary (N R.)	1	-	-	1	-	-	1	-
„ (S.R.)	1	-	-	1	-	-	1	-
Tyrone, . . .	2	-	-	1	-	-	1	-
Waterford, . . .	1	-	-	1	-	-	1	-
Westmeath, . . .	1	-	1	-	1	-	1	-
Wexford, . . .	1	-	1	-	1	-	1	1
Wicklow, . . .	1	-	1	-	1	-	1	-
	43	1	19	17	16	2	35	3

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.ROYAL COLLEGE OF SCIENCE, DUBLIN.
Session 1911-12.SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE,
FORESTRY AND CREAMERY MANAGEMENT.

A limited number of scholarships will be offered in 1911 for competition among young men in Ireland who desire to acquire a thorough knowledge of Technical Agriculture, and, in addition, one or more scholarships will be provided for students who intend to specialise in either Horticulture, Forestry, or Creamery Management. Each scholarship includes—(1) free admission to the first year's course of instruction in the College, (2) one third-class railway fare to Dublin at the beginning of the session, and one third-class fare from Dublin at the end of the session, and (3) either of the following at the option of the Department—(a) a maintenance allowance of one guinea per week while in attendance at the Royal College of Science or elsewhere, as the Department may decide; or (b) free board and residence at one of the Department's institutions; in the latter case a small grant will be made to each student towards the cost of books and apparatus.

A scholarship is tenable for one year, but selected candidates must undergo a probationary course of one term of about three months. If satisfactory progress be made by the holder, the scholarship may be renewed for a second, for a third, and, in certain circumstances, even for a fourth year, to enable the student to complete his course.

The Department do not undertake to employ, or find employment for, students at the close of the period of training.

Holders of these scholarships will be subject to the regulations made from time to time at the Royal College of Science, and will be required to devote their whole time to the course of study prescribed for them by the Department.

Candidates, who should be between 18 and 30 years of age on the 1st September, 1911, must make application on a form, which may be obtained from the Secretary, Department of Agriculture and Technical Instruction, Dublin, or the Registrar, Royal College of Science, Dublin, after the 1st February, 1911, and which should be returned not later than the 3rd August 1911.

Candidates must have been born in Ireland or have been resident in Ireland for three years immediately prior to the 1st September, 1911.

The examination will take place in Dublin, on the 16th, 17th, and 18th August, 1911. No expenses in connexion with attendance at this examination will be allowed.

Candidates will be tested in the following :—

A.—ENGLISH.

- (1) Composition—to be tested by an essay.
- (2) Grammar—Etymology, and the principles of Syntax.
- (3) Literature—the following works :—(a) Morley, "Burke" (English Men of Letters Series); (b) Shakespeare, "The Merchant of Venice."

B.—One of the following :—

LATIN ;
IRISH ;
FRENCH ;
GERMAN.

In these languages the papers will comprise—

- (1) Passages for translation from the following texts :—
 Latin—Cæsar, " De Bello Gallico " (Books II. and III.).
 Irish—p. ó Conaige " Népa nnapcuir éig."
 French—Souvestre " Un philosophe sous les toits."
 German—Hauff, " Das Wirthshaus im Spessart."
- (2) Easy passages for translation into English from other texts.
- (3) Questions in Grammar—Accidence and the principal rules of Syntax.
- (4) Short sentences for translation from English.

C.—MATHEMATICS.

- (1) Arithmetic—up to Simple Interest inclusive with Mensuration of simple plane figures and rectangular solida.
- (2) Algebra—to quadratic equations inclusive.
- (3) Plane Geometry—to be tested partly by questions requiring formal proofs of propositions from Euclid I.-III., and easy exercises thereon, and partly by practical problems to be solved by compasses and scale of equal parts.

D.—Practical experience of one of the following :—

AGRICULTURE ;
 HORTICULTURE ;
 FORESTRY ;
 DAIRYING AND CREAMERY MANAGEMENT.

Each applicant must have had substantial experience of practical work in connexion with farming, gardening, the management of woodlands, or dairying and creamery management. The examination may be written, oral and practical. The subjects will include all the ordinary work of farms, gardens, woods, or dairies, as practised in Ireland.

N.B.—On no account will a scholarship be awarded to a candidate who fails to attain a high standard in the subject he selects for this portion of the examination ; while excellence in that subject will be taken into consideration in case of deficiency in one or more of the others.

E.—ABILITY TO IMPART INSTRUCTION :—

Gauged by the style of the answers in both the written and the oral examinations.

Candidates who are qualified for scholarships by their examination on the foregoing subjects will be required to submit to an examination by a medical officer appointed by the Department. A scholarship will not be awarded in any case where the candidate is certified to be physically unfit to undertake the prescribed course of studies.

Last date for receiving applications, 3rd August, 1911.

October, 1910.

SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE, FORESTRY AND CREAMERY MANAGEMENT.

1911-12.

At the annual examination held on the 16th, 17th and 18th August, 1911, for Scholarships in Agriculture, Horticulture, Forestry and Creamery Management, tenable at the Royal College of Science, Dublin, seventy-seven candidates presented themselves.

Scholarships in Agriculture were awarded to the following eleven candidates:—

Cromie, Wm., Milvale, Ballynamagna, Rathfriland, Co. Down.
 Dick, James, Early Hill, Newtown Stewart, Co. Tyrone.
 Dickson, Robert W., Albert Agricultural College, Glasnevin.
 Gould, John, Probus, Macroom, Co. Cork.
 Loohey, William J., Kildonogue, Ardfinane, Cahir, Co. Tipperary.
 McConnell, Francis A., Hamiltonshawn, Armagh.
 Moloney, James, Ballylinan, Queen's County.
 Moore, John, Albert Agricultural College, Glasnevin.
 Patterson, William J., Albert Agricultural College, Glasnevin.
 Sheehy, Edmund, Albert Agricultural College, Glasnevin.
 Stewart, Henry R., Gargory, Ballyward, Banbridge, Co. Down.
 A Scholarship in Creamery Management was awarded to—
 Lyons, Joseph, The Creamery, Ballaghaderin, Co. Roscommon.
 No Scholarships were awarded in Horticulture or Forestry.

FORM A. 180 (a)
1911.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

THE ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

SESSION 1911-12.

The Albert Agricultural College is situated on the north side of Dublin in a healthy situation about 170 ft. above the sea level. It is easily reached by tram to the Glasnevin terminus, from which it is distant less than a mile. The College consists of a residence for about sixty students, together with a farm, orchard, and gardens, all covering an area of about 180 acres.

The College provides two distinct courses of instruction—one for farmers, the other for gardeners. The former or Agricultural Course occupies in the Department's scheme of agricultural education a position intermediate between the instruction given at the Agricultural Stations and that provided by the agricultural faculty of the Royal College of Science, Dublin. The Horticultural Course is intended for selected pupils who are seeking to qualify for the post of Instructor in Horticulture. (For particulars relative to the Horticultural Course see separate leaflet, A 153a.)

AGRICULTURAL COURSE.

This course is intended for young men who desire a technical and practical knowledge of agriculture, to fit them for entrance to the Royal College of Science, Dublin, for becoming farmers, or for engaging in any other occupation—such as creamery management—which requires technical training in the sciences underlying agriculture. It includes instruction in agriculture in the classroom, farmyard, and fields, supplemented by lessons in dairying, horticulture, poultry management, bee-keeping, and veterinary hygiene. The elements of physics, chemistry, botany, zoology, and entomology are taught so far as is necessary to the proper understanding of the principles underlying the most approved farmyard practice.

Instruction is also given in bookkeeping, surveying, and wood-work, while literature, mathematics, and drawing receive such attention as is found requisite.

Every encouragement is given to the pursuit of athletics and to the development of social intercourse among the students.

The College discussion society meets frequently throughout the session. The papers read before it relate to topics of current interest to the farming community.

The library is supplied with standard works on agriculture, and copies of the best farming periodicals are procured regularly for students' use.

THE STAFF.—The staff consists of Principal, House Masters, Agriculturist, and teachers of chemistry, botany, zoology, veterinary hygiene, horticulture, dairying, poultry keeping, bee-keeping, and woodwork. A competent Drill Instructor attends twice weekly to see to the physical training of the students.

The Clergy of the different denominations also visit the College weekly to give religious instruction. The domestic comfort and bodily health of the students are under the care of an experienced Matron.

THE SESSION.—The course of study extends over a session of ten months, which for the year 1911-12 will open on Tuesday, the 16th October, 1911, and end on Friday, the 9th August, 1912. There will be two intervals, each of about a fortnight—during which students will return to their homes—one at Christmas and the other at Easter.

COLLEGE DIPLOMA.—The College Diploma is awarded partly on the result of the sessional examinations and partly on the work done throughout the year. It is of two classes, the first being reserved for those students who add to an intelligent grasp of scientific principles a high standard of skill in practical farm work.

Prizes are given by the Department for progress made, for work done, and for services cheerfully rendered to the common weal. These prizes are awarded after consultation with the Principal, and not merely on marks obtained at the examination.

CONDITIONS OF ADMISSION.—Admission to the College is conditional on passing the entrance examination and furnishing evidence of good health and character. Only resident students who are prepared to stay the whole session and to take the full curriculum are admitted. They must not be less than 17 nor more than 30 years of age on 1st September, 1911.

The entrance examination will be held in the first week in September, 1911, at four centres situated one in each province. Each applicant for admission will be notified in due course as to the centre at which he will be required to present himself. No expenses will be allowed in respect of attendance.

The subjects included in the examination will be as follows :—

- (1.) *English*, including dictation and composition.
- (2.) *Arithmetic*, including calculations requiring a thorough knowledge of weights and measures, decimal and vulgar fractions, percentages, and interest.
- (3.) *Mathematics*.—The elements of mensuration—lengths, areas, volumes; and algebra to simple equations.
- (4.) *Agriculture*.—The questions on this subject are framed with a view to testing knowledge acquired by practical experience of farm work. No text-book is prescribed or recommended. The examination may be oral as well as written.

FEES.—The fees for tuition, board, residence, laundry, and ordinary medical attendance during the entire session are :—

For students whose parents or guardians derive their means of living mainly from farming in Ireland, . . .	£15
For students other than the foregoing, . . .	£50

The fees are payable to the Principal in two instalments, viz., one of £10 (or £30) on entrance and the balance on 1st February. In addition to the instalment of the fee payable on entrance each student must deposit with the Principal a sum of £3 to cover the cost of repairs to clothing, and of books and stationery. The unexpended balance, if any, of this deposit will be returned at the close of the session.

OUTFIT.—Students are required to provide themselves with a proper outfit, particulars of which will be supplied to candidates successful at the entrance examination.

APPLICATION FOR ADMISSION.—Application must be made on the prescribed form, to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET,
DUBLIN.

Applications will be dealt with in the order of their receipt in the Department's Offices. They should be forwarded not later than the 15th August, 1911.

Form A. 153 (a.)
1911.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

INSTRUCTION IN FRUIT-GROWING AND GENERAL
GARDENING.

HORTICULTURAL SCHOOL,
ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

SESSION, 1911-12.

The course provided at this School is suited for men who have already had experience in fruit-growing and general gardening such as can be obtained by working for four or five years under a fully qualified gardener. In addition to the practical work in the gardens, class-room instruction is given to the students to enable them to understand the scientific principles underlying horticulture.

Applicants for admission to the 1911-12 session must be at least twenty years of age on the 1st October, 1911, in good health and of strong constitution. They should have received a fair general education, and will be required to produce evidence that they have been employed regularly at garden work.

Students will be admitted on probation as the result of an examination which will be held in Dublin on the 25th August, 1911. The subjects included in the examination will be:—

- (1.) English—to be tested by dictation and a short letter.
- (2.) Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures; and percentages.
- (3.) Practical Fruit-growing and Gardening.

A high standard will not be expected in English or arithmetic. The examination in practical fruit-growing and gardening will cover the whole range of these subjects.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Successful candidates will be required to enter on their duties on the 10th October, 1911.

The session will close on the 30th September, 1912. Students may be retained at the School beyond that date, if, in the opinion of the Department, they would profit by an extension of the course.

Students are provided with furnished lodging, including coal and light, and receive an allowance of 14s. per week during their first session and of 16s. per week during their second session. They are required to find their own board.

Students of the Horticultural School are subject to the conditions under which the gardeners at the College are employed.

The Department do not undertake to employ or to procure employment for students at the close of the courses, but the names of those who qualify are sent to County Committees of Agriculture with an intimation

that they are eligible for appointment by such Committees, to instructorships under the Department's Scheme of Instruction in Horticulture and Bee-keeping.

Several men who have passed through the School are now employed by County Committees of Agriculture.

Application to attend the examination must be made on the prescribed form, to be obtained from

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

Last date for making application—11th August, 1911.

FORM A. 176 (a.)

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.
FARM APPRENTICESHIPS.

AGRICULTURAL STATION, ATHENRY, COUNTY GALWAY.

Young men who intend to become farmers are admitted to the Station for one year, as apprentices, for a course of practical training in several branches of farming.

Apprentices are admitted without payment of any fee. They are required to take part in all the operations of the fields and of the farmyard. They must perform diligently all work assigned to them by the Farm Manager or his foreman. In winter, class-room instruction is provided in the evenings. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the date of making application, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona fide* occupation on a farm. Preference will be given to applicants from the province of Connaught. It will also be a recommendation if the applicant has attended a course of instruction held under the Department's Scheme of Winter Agricultural Classes, or if he produces a Certificate from an Itinerant Instructor in Agriculture that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

Applications for apprenticeships may be made at any period of the year. Apprentices will be admitted in the order of the receipt of their applications in the Department's offices. The Department do not guarantee admission to any applicant. An apprentice will not be retained at the station if he is found unable to perform a fair day's work or to be otherwise unsuitable.

On completion of twelve months at the Station, apprentices whose conduct has been good, and whose work has been done with care and diligence and to the satisfaction of the Farm Manager, will receive small payments proportioned to the value of their work. In no case will such payment exceed £10.

OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to applicants on being notified of their admission.

A sum of £1 must be deposited with the Superintendent on entrance to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded on the termination of the apprenticeship.

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

FORM A. 176 (b)
1911.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

AGRICULTURAL EDUCATION FOR YOUNG MEN.

SESSION 1911-12.

FARM APPRENTICESHIPS.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1911, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona fide* occupation on a farm. Preference will be given to applicants from the province of Ulster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It will also be a recommendation if the applicant produces a certificate from the Itinerant Instructor in Agriculture for the County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in Ballyhaise House attached to the Station, where they are under the immediate supervision of the Principal. They must take part, as directed, in all the work of the farm.

The Session will commence on the 10th October, 1911, and close on the 9th August, 1912. It will be divided into two terms, viz., the Winter Term, from the opening of the Session to the 3rd April, 1912; and the Summer Term, from the 16th April, 1912, to the close of the Session. There will be an interval at Christmas of about a fortnight, during which the apprentices may return to their homes. Apprentices who are required at home for farm work during the spring and summer may leave the Station at the end of the Winter Term. New apprentices may be admitted for the Summer Term to fill vacancies thus caused.

The course of training will include :—(1) classroom instruction in agricultural subjects which have a direct bearing on farming in Ireland; (2) instruction in subjects of a general educational nature, such as English, arithmetic, bookkeeping, &c., which will be useful to the apprentices in their future career as farmers; (3) practical instruction in all the work of the fields and farmyard in connection with the various seasonable operations and with permanent improvements; (4) lessons in veterinary hygiene and woodwork.

The Winter Term will be occupied principally with classroom instruction in agricultural and general subjects. The following subjects will be included in the agricultural course :—

Soils, tillages, manures (natural and artificial), seeds, grasses, weeds,

treatment of pastures, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, elementary chain surveying, and elementary science, explanatory of the principles underlying ordinary farm practice.

The Summer Term will be given almost exclusively to practical training in the outdoor work of the farm.

An apprentice will not be retained at the Station if he is found to be unable to do a fair day's work, or to be otherwise unsuitable.

Admission as an apprentice is conditional on passing the entrance examination, and producing certificates of good health and character.

Applicants who have been pupils at Winter Agricultural Classes will be exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination :—

Arithmetic—Simple calculations requiring a knowledge of weights and measures, vulgar and decimal fractions, and percentages.

English—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate will be admitted as an apprentice whose general education is too backward to admit of his taking advantage of the classroom instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the inclusive fees for tuition, board, residence, laundry and ordinary medical attendance are proportional to the aggregate tenement valuation of their holdings, as follows :—

	Per Session.
Where the aggregate valuation does not exceed £20,	£3
Exceeds £20 but does not exceed £40,	£5
Exceeds £40 but does not exceed £100,	£10
Exceeds £100,	£15

2. For apprentices not included in the foregoing classes, £25

These fees are in respect of the Winter Term. No additional fees are required from apprentices who are retained for the Summer Term. Apprentices admitted for the Summer Term only pay fees at half the foregoing rates.

Fees must be paid to the Principal on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the Session.

FREE PLACES.

A small number of free places provided under the terms of the Anne Hall Bequest are available from applicants from the Counties of Fermanagh and Londonderry. Applications for these places must be addressed in the first instance to the Agricultural Superintendent, Royal Dublin Society, Leinster House, Dublin.

OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's offices.

FORM A. 134 (a). 1911.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

SESSION 1911-12.

CREAMERY COURSE.

Provision has been made at the Agricultural Station, Ballyhaise, for a course of technical instruction for young men who intend to become Creamery Managers.

The course will commence on Tuesday, 10th October, 1911, and will terminate on Friday, 8th March, 1912. There will be an interval of about a fortnight at Christmas.

The following subjects will be included in the course :—Physical Science in relation to Creamery work ; Dairy Bacteriology ; Dairy Technology ; Dairy Engineering ; Business Methods.

The course will be particularly suitable for those who have had experience of creamery work.

Students who intend to compete for certificates under the Department's scheme for improvement in the management of creameries will have special facilities for the study of the subjects prescribed for the examination in connection with these certificates which is to be held in March, 1912.

At the close of the technical course at Ballyhaise Agricultural Station a limited number of the best students will be afforded facilities for learning the practice of Creamery Management during the Summer of 1912, in a selected creamery in Ireland. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery.

Applicants for admission to the course must be at least eighteen years of age on the 1st October, 1911.

Admission is conditional on passing the entrance examination, producing certificates of good health and character, and paying the specified fee.

Applicants who fulfil the foregoing conditions are admitted in the order in which their applications, on Form A 134, are received in the Department's offices, preference being given, however, to those who have experience of creamery work.

Students are required to take part, as directed by the Principal, in all branches of the outdoor work of the Station which relate to dairying. They must conform strictly to the disciplinary rules in force at the Station.

ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination :—

Arithmetic.—Calculations requiring a knowledge of weights and measures, decimal and vulgar fractions, areas, volumes and percentages.

English.—Dictation, Grammar and Composition.

No expenses will be allowed to candidates in connection with their attendance at this examination.

FEE.

The fee for tuition, board, residence, laundry and ordinary medical attendance during the course will be £10.

The fee must be paid to the Principal of the Station on entrance, and, in addition, a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the course.

OUTFIT.

Students will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

Applications should be forwarded as soon as possible, and not later than 1st September, 1911.

Form A. 176 (d)

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

AGRICULTURAL EDUCATION FOR YOUNG MEN.

SESSION 1911-12.

FARM APPRENTICESHIPS.

AGRICULTURAL STATION, CLONAKILTY, COUNTY CORK.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

The farm is managed by an experienced agriculturist, under whose direction the apprentices are required to take part in all the work of the fields and of the farmyard, whether in connection with seasonable operations or permanent improvements. In the class-room attention is given in the evenings and at other times when out-door work is not pressing, to English, Arithmetic (including Surveying), Book-keeping and Technical Agriculture. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices, and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1911, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona fide* occupation on a farm. Preference will be given to applicants from the province of Munster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It will also be a recommendation if the applicant produces a certificate from the Itinerant Instructor in Agriculture for the County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in the buildings attached to the Station, where they are in charge of a house master and matron.

The Session will commence on the 10th October, 1911, and will terminate on the 9th August, 1912. There will be two intervals, each of about a fortnight, during which the apprentices may return to their homes—one at Christmas and the other at Easter.

Admission as an apprentice is conditional on passing the entrance examination, producing certificates of good health and character and paying the required fee according to the scale indicated overleaf.

Applicants who have been pupils at Winter Agricultural Classes will be exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

An apprentice will not be retained at the Station if he is found to be unable to perform a fair day's work, or to be otherwise unsuitable.

ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination :—

Arithmetic.—Simple calculations requiring a knowledge of weights and measures.

English.—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate will be admitted whose general education is insufficient to enable him to profit by the class-room instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the inclusive fees for tuition, board, residence and ordinary medical attendance are proportional to the aggregate tenement valuation of their holdings, as follows :—

	<i>Per Session.</i>
When the aggregate value does not exceed £20, . . .	£3
Exceeds £20 but does not exceed £40, . . .	£6
Exceeds £40 but does not exceed £100, . . .	£10
Exceeds £100, . . .	£15

2. For apprentices not included in the foregoing classes, . . . £20

Apprentices will be notified of the fees payable by them. Fees must be paid to the Superintendent on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the session.

OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's Offices. They should be forwarded not later than 14th August, 1911.

AGRICULTURAL COLLEGE, MOUNT BELLEW.

SESSION 1911-12.

The College stands in a picturesque and healthy position in the midst of the charming woodland scenery of the Mount Bellew Demesne.

It is under the management of the Franciscan Brothers, who hold the highest testimonials in Practical Agriculture and Agricultural Science.

Laboratories with all modern requirements, and a model farmyard have been built by the Department of Agriculture. There is also a School Museum containing a collection of Irish soils and rocks of agricultural importance.

The farms, gardens, and laboratories afford ample facilities for a thorough course in Technical Agriculture and also in the subjects set out below.

Students are required to take part in all farm operations in the field, farmyard, garden and dairy. They must have attained the age of sixteen years before admission.

The course of instruction at the College includes :—

- 1.—Practical Farming. Every Student is encouraged to take part in all farming operations, and is taught to follow the working of the system of Farming adopted, with interest and profit. Each Student keeps for himself a set of farm books and notes, all outlays and incomes for Farm Operations, Live Stock and Dairy, &c., as if the farm were his own. The final balancing at end of year tells him exactly how the farm paid, what paid best and where losses were sustained, &c.
- 2.—A course of Physics, Chemistry, and Biology explanatory of the natural processes which increase or diminish the returns from farm operations.
- 3.—Farm calculations, Surveying of Land. Values of Manures and Feeding Stuff.
- 4.—Study of Seeds, Grasses, Weeds and Pastures.
- 5.—Use of Natural and Artificial Manures.
- 6.—Management of Live Stock. Winter Dairying.
- 7.—Veterinary Hygiene.
- 8.—Fruit Growing.
- 9.—Bee-keeping.
- 10.—Farm Account-keeping.

TERMS.

A number of Scholarships value £10 each will be awarded this year on the result of a qualifying Entrance Examination in the following subjects :— (a) English : Dictation, Grammar and Composition ; (b) Arithmetic tested by simple questions, involving a knowledge of weights and measures, proportion, decimal and vulgar fractions of a simple kind, and percentages.

N.B.—The object of this examination is mainly to find out if candidates for scholarships have sufficient ability to profit by the programme of work outlined in the Syllabus. The Examination will be conducted by the Department of Agriculture and Technical Instruction for Ireland. Students who have returned their application forms, duly filled, will be notified as to the time and place of their Entrance Examination. The expenses connected with their attendance at this examination must be defrayed by the candidates.

The Pension for those awarded Scholarships will be £15 payable in advance on day of entrance.

For all others the Pension will be £25, payable in two instalments, £15 on day of entrance, and £10 on the first of the following March. The fee for non-resident students is £5 per year ; payable in advance.

Students are under the supervision of the Brothers at all times, on the farm, in the laboratories, dormitories and recreations.

Each Scholarship Student will be required to give an undertaking that it is his intention to become a Farmer in Ireland, or that he has a good prospect of obtaining occupation on a farm in Ireland.

Students who do not attend punctually on the opening day or do not return on the appointed day after the Christmas and Easter holidays, are liable to have their Scholarships cancelled.

FORM A. 122 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

THE MUNSTER INSTITUTE, CORK.

The classes at the Institute are open to female students only.
The course of training includes :—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, calves and pigs ; in the keeping of small gardens, and in the manipulation and caring of bees.
- III. Instruction in poultry-keeping. Breeds ; their suitability for different purposes and different localities ; housing, feeding and management ; grading and packing of eggs ; hatching and rearing of chickens ; fattening, killing, plucking, trussing and preparation for market.
- IV. Instruction in domestic work, embracing plain cookery, plain needlework, laundry work, and home nursing.

The fee for tuition, board and lodging during one term is £3 3s., and is payable to the Superintendent of the Institute on entrance.

Four terms, each of about eleven weeks' duration, and commencing respectively in January March, July and October, are held in each year.

Intending students must be at least seventeen years of age on the date of their admission to the Institute. They are required to produce certificates of good health and character, and to show that they have received sufficient general education to enable them to follow the course.

Students are eligible for admission to a second consecutive term, provided they attain the required standard at the examination at the conclusion of their first term.

Students who have attended during two terms, and who are desirous of qualifying for the position of Itinerant Instructor in butter-making or poultry keeping under a County Committee of Agriculture and Technical Instruction or of Teacher in a School of Rural Domestic Economy for girls, are admitted to a third term on attaining the required standard at the second terminal examination and satisfying the Department's examiner as to their ability to impart instruction. If their progress during the third term is satisfactory they are re-admitted to enable them to complete their training. Attendance at the Institute during five or six terms is necessary to qualify students for admission to the examinations for Instructorships and Teacherships.

Girls who desire to become dairymaids in creameries, and who have attended two terms either at the Munster Institute or at a School of Rural Domestic Economy, will, on attaining the required standard at their second terminal examination be admitted to the third term course at the Institute. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid

in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks.

The Department do not undertake to employ or to find employment for students on completion of their training.

A limited number of free places and half-free places are awarded to the students who display special merit at the terminal examination of the first term to enable them to avail of a second term entirely or partially free of expense. A few similar places are also offered to students who have attended two terms at the Institute.

The students are at all times under the supervision of an experienced matron.

Applications for admission must be made on the prescribed form which can be obtained from—

THE SECRETARY,
DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

FORM A 255 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

THE ULSTER DAIRY SCHOOL, COOKSTOWN, CO. TYRONE.

The School is situated on an extensive tillage and dairy farm about three miles from Cookstown Railway Station. It is provided with the most modern equipment for the teaching of the several subjects included in the programme.

The classes are open to female students only.

The course of training includes :—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, and in farm-yard lore.
- III. Instruction in poultry-keeping. Breeds; their suitability for different purposes and different localities; housing, feeding and management; grading and packing of eggs; hatching and rearing of chickens by natural and by artificial methods; fattening, killing, plucking, trussing and preparation for market.
- IV. Instruction in domestic work, embracing plain cookery, plain needlework and laundry work.

The fee for tuition, board and lodging during one session is £3 3s., and is payable to the Superintendent of the School on entrance.

Four terms, each of about eleven weeks' duration, and commencing, respectively, in January, March, July, and October, are held in each year.

Intending students must be at least seventeen years of age on the date of their admission to the School. They are required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course. This examination is held at the School at the opening of each session.

Students are eligible for admission to a second consecutive session, provided they attain the required standard at the examination at the conclusion of their first term.

Students who have attended during two terms, and who are desirous of qualifying for the position of Itinerant Instructor in butter-making or poultry-keeping under a County Committee of Agriculture or of Teacher in a School of Rural Domestic Economy for girls may be admitted to a third session provided they attain the required standard at the second terminal examination and satisfy the Department's examiner as to their ability to impart instruction. If their progress during the third term is satisfactory they may be re-admitted to a fourth, fifth, or even a sixth term at the option of the Department to enable them to complete their training.

Girls who desire to become dairymaids in creameries and who have attended two terms either at the Ulster Dairy School or at a School of Rural Domestic Economy, will, on attaining the required standard at their second terminal examination, be admitted to the third term course at the Ulster Dairy School. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks.

The Department do not undertake to employ or to find employment for students on completion of their training at the School.

The students are at all times under the supervision of a responsible master.

Applications for admission must be made on the prescribed form, which can be obtained from—

THE SECRETARY,
DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

FORM A 135 (b).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY, CONVENT OF ST. LOUIS, RAMSGRANGE, COUNTY WEXFORD.

The school is open to female students over sixteen years of age without restriction as to religious denomination.

The course of training is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work and Needle-work. Instruction in English, Arithmetic, Book-keeping, Elementary Science, and Chemistry is also provided.

The school year extends from September to August, and is divided into two sessions, which begin, respectively, in September and in March.

Thirty places for resident students are provided by the Department. The fee for tuition, board and lodging during one session, payable by the holders of these places, is £3, and the applicants are required, before admission to the school, to produce certificates of good health and character and to pass an examination in the elements of English and Arithmetic. The fee payable by resident pupils other than holders of these places is £10

per session. Day pupils are admitted at a fee of £1 per session. Fees must be paid to the Manager on Entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive Session.

Application for admission as a resident student must be made on the prescribed form, which can be obtained from

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN.

Applications for the admission of day pupils should be made to the Manager at the school.

FORM A 135 (d).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY,
ST. MARY'S CONVENT OF MERCY, PORTUMNA, CO. GALWAY.

The school is open to female pupils over sixteen years of age without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work, and Needle-work.

The school year extends from the beginning of October to the end of August, and is divided into two sessions, which begin, respectively, in October and in March.

Intending pupils are required to produce certificates of good health and character. They will not be admitted unless they have received sufficient general education to enable them to follow the course.

RESIDENT PUPILS.

A number of places for resident pupils are provided by the Department.

The fee for tuition, board and lodging during one session, covering a period of about twenty-four weeks, is £3 3s., and is payable to the Manager on entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive session on payment of the above-mentioned fee.

Application for admission must be made on the prescribed form which can be obtained from

THE DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN.

DAY PUPILS.

Applications for the admission of day pupils should be made to the Manager at the School. No fees are payable by day pupils.

NOTE.—The conditions of admission to the Schools of Rural Domestic Economy at Clifden, Co. Galway, and at Clarvenorris, Swinford and Westport, Co. Mayo, are similar to those indicated for Portumna School.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY.
KILLESHANDRA VILLAGE INSTITUTE, COUNTY CAVAN.

The School is open to female pupils over fifteen years of age, without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life. It includes Household Management, Cookery, Laundry-work, and Needle-work. Attention is also given to Dairy-work and Poultry-keeping.

Intending pupils must undertake to attend regularly and punctually. They may be required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

The school year is divided into two sessions which begin, respectively, in August and February.

RESIDENT PUPILS.

Arrangements have been made which admit of five pupils being boarded and lodged at the School. The girls to whom residential places are awarded are selected by the Manager, subject to the approval of the Department.

Pupils, whose conduct and progress during their first session are regarded by the Department as satisfactory, are eligible for admission to a second consecutive session.

DAY PUPILS.

Classes for day pupils are held each week day (Saturday excepted), from 11 a.m. to 5 p.m.

In the case of persons, such as mothers of families, who are too much occupied with their household work to attend regularly throughout the session, arrangements will be made to admit of their attending any one course or separate lessons, without fee.

FEES.

The fees are proportioned to the valuation of the holdings of the pupils' parents or guardians, as follows :—

A. FOR DAY PUPILS.

Where the valuation does not exceed £20 . . .	3s. 6d. per session.
Where the valuation exceeds £20 but does not exceed £40 . . .	5s. 0d. " "
Where the valuation exceeds £40 . . .	7s. 6d. " "

B. FOR RESIDENT PUPILS.

Where the valuation does not exceed £20 . . .	£2 " "
Where the valuation exceeds £20 but does not exceed £40 . . .	£3 " "
Where the valuation exceeds £40 . . .	£4 " "

Applications for admission should be made to

THE DOMESTIC ECONOMY INSTRUCTOR,
THE INSTITUTE,
KILLESHANDRA.

FORM A. 181 (a). 1911.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

FORESTRY INSTRUCTION.

A limited number of apprenticeships in Forestry will be awarded on the result of an examination which will be held in Dublin on the 7th September, 1911.

Applicants for apprenticeships must be not less than eighteen years of age and not more than twenty-five years on the 1st October, 1911. They should be in good health, and of strong constitution, and have received a fair general education. Preference will be given to those applicants who have had experience in working in woods.

The subjects included in the examination will be—

English—to be tested by dictation and a short letter.

Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures, proportion, and percentages.

No expenses will be allowed to candidates in connection with their attendance at this examination.

The successful candidates will be required to work under the directions of a skilled foreman, for at least one year, in one of the woods belonging to the Department. During this period apprentices will be given facilities for improving their general education. Apprentices who acquit themselves in such a manner as to lead the Department to believe that they are likely to make suitable foresters may, at the end of this period, be selected to attend a further course of instruction at Avondale Forestry Station, Rathdrum. The duration of the course at Avondale may extend from one to two years, and in addition to class-room instruction apprentices will be required to take part in the work of the woods attached to the station or in such of the woods belonging to the Department as may be decided on from time to time.

Apprentices will be required to enter on their duties on the 3rd October, 1911.

Each apprentice will receive during the first year an allowance at the rate of 14s. per week, with furnished lodging. When in receipt of this allowance the apprentices will be required to find their own board. Such apprentices as are selected to attend at Avondale station for a further period of training will be provided with free board, lodging and education and receive allowances at the rate of 6s. per week.

Apprentices must undertake to conform with the rules and regulations made from time to time in connection with their work in the Department's woods and at the Forestry station.

The engagement between apprentices and the Department may be determined at any time by one week's notice on either side.

The Department do not undertake to employ or to procure employment for apprentices on completion of their training.

Applications for apprenticeships must be made on the prescribed forms to be obtained from—

THE DEPARTMENT OF AGRICULTURE

AND TECHNICAL INSTRUCTION,

UPPER MERRION STREET,

DUBLIN.

Last date for making application—24th August, 1911.

Form A. 169 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

FORESTRY.

NOTICE TO OWNERS OF WOODS AND PERSONS PROPOSING
TO FORM PLANTATIONS.

The Department are prepared to afford expert assistance to landowners and others who may require advice on such matters as the selection of sites for plantations, suitability of soil, choice of trees, treatment and

valuation of existing woods, draining and fencing of woodlands, valuation of timber, growing of osiers, &c.

The Department's Forestry Expert will, so far as time will permit, visit existing woods or lands which it is proposed to plant. In such cases a fee of £2, to cover part of the Expert's expenses, will be charged when the visit does not entail an absence from headquarters of more than three days. For visits extending over a longer period a special fee may be arranged, but the Department do not guarantee that more than one complete day will be allowed for each visit. If a visit from the Expert is not required, advice will be given by letter free of charge.

The Department are also prepared to facilitate the planting of small areas by placing at the disposal of persons who propose to form plantations the services of any working foresters who can be spared from the Department's woods for a few weeks in the planting season. The wages and travelling expenses of these foresters must be paid by the persons by whom they are employed.

The undementioned leaflets on forestry subjects have been issued by the Department, and will be supplied to applicants free of charge :—

No. 65.—Forestry.—	The Planting of Waste Lands.
No. 66. "	The Proper Method of Planting Forest Trees.
No. 67. "	Trees for Poles and Timber.
No. 68. "	Trees for Shelter and Ornament.
No. 70. "	Planting, Management, and Preservation of Shelter Belt and Hedgerow Timber.
No. 71. "	The Management of Plantations.
No. 72. "	Felling and Selling Timber.
No. 73. "	The Planting and Management of Hedges.
No. 83. "	Cultivation of Osiers.
No. 94. "	Cost of Forest Planting.

Applications for visits from the Expert or for the services of skilled planters should be made on the forms provided for the purpose, and will be attended to as far as possible in order of their receipt in the Department's offices.

Letters, which need not be stamped, should be addressed to—

THE SECRETARY.

DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION,
DUBLIN.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN,

August, 1911.

No. A 15549-11.

AGRICULTURAL SCHEMES, 1911-12.

SIR,

In forwarding, for the information of your Committee, the accompanying copies of the Agricultural Schemes for 1911-12, the Department desire to direct special attention to the alterations which have been made in the schemes, as well as to some of the more important regulations.

Scheme No. 1.—Horses.

It will be observed that the 31st August, 1911, is fixed as the last date for receiving applications for the registration of stallions *without fee*. Applications received between 1st and 30th September, 1911, will not be accepted unless accompanied by a fee of £1. An application received between 30th September and 30th November, 1911, must be accompanied by a fee of £5 (clause 13).

"Shivering" has been added to the list of hereditary diseases under clause 16 (2).

Scheme No. 2.—*Cattle.*

Under clause 12, premiums may be awarded in special cases to five-year old bulls.

Scheme No. 6.—*Subsidies to Agricultural and Industrial Societies, &c.*

Special attention is directed to the following important changes, viz :— (1) requiring the prize schedule to be submitted in duplicate prior to publication, Clause 4 (1); (2) exempting from veterinary examination stations on the Department's Register for 1912 when competing either in reserved or open classes at a show subsidised by a County Committee, Clause 4 (2); (3) providing prizes in classes for registered Irish Draught mares and for the progeny of such mares by a registered Irish Draught stallion, Clause (4) 3; (4) making provision for prizes for registered dairy cows and their progeny, Clause 4 (4).

Scheme No. 7.—*Prizes for Cottages and Small Farms.*

Under clause 7, marks may be given for improvements in buildings, reclamation of land or the keeping of records in connection with the Department's Dairy Cattle scheme or Poultry-keeping scheme.

Scheme No. 10.—*Winter Agricultural Classes.*

Attention is directed to the necessity for selecting centres for classes at the earliest possible date, preference being given to thickly populated tillage districts. No place should be selected as a class centre where it appears unlikely that a minimum regular attendance of ten students can be secured, Clause 3 (1).

Scheme No. 11.—*Poultry Keeping.*

After Stations have been reported on by the instructor to be fully stocked, at least two inspections of all hen and duck, geese and turkey stations in the County should be made before 31st May (clause 9). In the case of hen and duck stations no birds should be disposed of until after that date., Clause 10 (7). In the case of turkey stations, the inspections must be made between 1st February and 15th April.

Under Clause 10 (5), at least one-third of the hens at a station should be replaced with early hatched pullets, and *one-third of the ducks with ducklings.*

Grants not exceeding £1 may be made for suitable day shelters approved by the Department (see clause 12).

Special attention is directed to the note under clause 10 with regard to the exceptional cases in which (1) pure breeds other than those eligible for premiums, and (2) cross-bred hens, may be kept at stations.

Scheme No. 12.—*Tutorial and Practical Classes in Poultry-Keeping.*

It is provided that classes shall be held at each selected centre for at least two, but not more than four weeks; and that eighteen pupils may be admitted to any class (clause 2). Previous to the hour fixed for the holding of a class the Instructor should visit the centre to unpack the outfit and make final arrangements.

Scheme No. 14.—*Horticulture and Bee-Keeping.*

With regard to demonstration plots, it is not considered desirable to continue the grant to any plot for more than three years. The County Committee are required to forward to the Department on the prescribed form, not later than 1st January, 1912, a list of demonstration plots selected for the year, accompanied, in the case of new plots, by a detailed report from the Inspector, clause 10 (c).

The Department observe that in several cases the forms of undertaking

required under clause 10 (b.5.) have not been duly obtained and forwarded to these offices. When the new plots have been selected by the Committee and approved by the Department, copies of this form will be supplied to the Committee on application to the Department, and no expenditure should be incurred in connection with any plot until the owner has completed the undertaking.

EQUIPMENT.

It will be observed that a regulation has been inserted in schemes Nos. 9, 10, 12, 13 and 14 imposing on the Secretary of the County Committee the duty of keeping an inventory and being responsible for the custody of all equipment provided for the purposes of each of these schemes.

A supply of the schemes will be issued to you on receipt of your application, which should be made on the accompanying form. It is particularly requested that you will not ask for more copies than can be profitably used during the year.

I am, Sir,

Your obedient Servant,

T. P. GILL,
Secretary.

The Secretary of each
County Committee of Agriculture.

SCHEME No. 1.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS OF HORSES.

1912.

GENERAL REGULATIONS.

1. The main objects of this scheme are to encourage the improvement of Horse Breeding in Ireland by inducing stallion owners to keep suitable and sound sires of a high degree of excellence, and by inducing farmers to retain their best young mares for breeding purposes. When arranging the details of this scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of horses in a county will depend on—(1) the amount provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (6) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as

the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, all details of schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that Committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department, but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely for nominations of mares.

9. In the event of there not being a sufficient number of registered stallions in any county for the purposes of this scheme, the Department may provide for such county, under certain conditions to be prescribed by them, by assisting approved applicants, whether individuals or associations, to buy suitable stallions under the Department's scheme of loans for the purchase of stallions.

REGISTRATION OF STALLIONS.

10. Thoroughbred stallions, calculated to produce weight-carrying hunters and high-class harness horses, may be registered for any county in Ireland.

Irish Draught and Half-bred stallions may be registered for any county in Ireland.

All Clydesdale and Shire stallions registered in 1911 may again be offered for registration under this scheme for the particular districts in which they were registered during that year, but no other stallions of these breeds will be accepted for registration in 1912 except for the Province of Ulster, the counties of Dublin and Louth, and the district comprised within a radius of ten miles of the city of Cork.

11. The Department will publish a Register of Thoroughbred Irish Draught, Half-bred, Clydesdale, and Shire Stallions approved for service under this scheme. Owners of suitable stallions are invited to apply to have their horses placed on the Register, subject to the provisions of this scheme. A stallion to be entitled to a subsidy in the form of nominations, or otherwise, must be registered or accepted for registration in the Department's Register of Stallions for the year 1912.

Copies of the Register, when published, may be had free of charge on application to the Department.

12. (1.) Owners offering their stallions under this scheme must, if required, submit them to inspection and veterinary examination by the Department. Notice of the arrangements as to place and method of inspection will be given.

(2.) Owners of stallions failing to present their animals for inspection on the dates and at the places selected will be liable to have their applications cancelled by the Department.

(3.) Thoroughbred stallions, to qualify for registration, must be entered

in Weatherby's Stud Book. Clydesdale and Shire stallions must be entered in the stud book of their respective breeds. If required the stallion owner or (if the stallion is being purchased with a view to registration in Ireland) the vendor must produce a certificate from the keeper of the stud book to the effect that the stallion offered for registration is entered in the stud book or will duly appear in the next volume.

(4.) No application will be considered in which any particular required in the form of application is not supplied.

(5.) No application will be considered in respect of a stallion foaled in 1910.

(6.) The owner of a stallion accepted under this scheme must agree not to permit that stallion to serve more than fifty nominated mares entitled to its services. This regulation is subject, however, to the conditions stated in Clauses 21 (14), 22 (1), and 30.

(7.) Stallions approved under this scheme will be accepted for particular districts only, and shall not, without the written consent of the Department, be removed to other districts. If a stallion is removed without such consent to a district for which it was not accepted, the name of such stallion will be removed from the Register, and the owner shall forfeit all claim to any monies which may be payable to him under this scheme.

13. Forms of application for the purposes of this scheme may be had from the Department.

One of these forms, accurately filled up in every particular and signed by the owner or his agent, must be lodged in or sent by post so as to reach the offices of the Department not later than the 31st August, 1911.

An application received between 1st and 30th September, 1911, will not be accepted unless accompanied by a fee of £1. An application received between 30th September and the 30th November, 1911, must be accompanied by a fee of £5.

Applications for registration in respect of stallions already at stud in Ireland will not be accepted after the 30th November, 1911.

14. (1.) Applications in respect of stallions imported into Ireland after the 31st August, 1911, will be considered without fee if received on any date up to the 28th February, 1912. Similar applications in regard to stallions in Ireland which have not previously been used for stud purposes will be considered up to 28th February, 1912, provided they are each accompanied by a fee of £5. The entry of such stallions in the published Register for 1912 cannot, however, be guaranteed, but the owners of such stallions will be accorded all the privileges enjoyed by the owners of stallions appearing in the printed Register.

(2.) A person in Ireland intending to import a stallion or to buy a stallion already located in Ireland is advised not to complete the purchase until he has received formal notice in writing from the Department that the stallion in question will be accepted under this scheme for a particular district. [See Clause 18.]

(3.) The Department will, as far as practicable, supply the service of their Inspectors free of charge to persons in Ireland intending to purchase and import suitable stallions for districts in which there is not a sufficient number of approved stallions for the purposes of this scheme; the stallion, however, must have been seen and provisionally approved by the intending purchaser.

(4.) The vendor of a Pure-breed stallion must, if required, submit a certificate from the Secretary of the stud book to the effect that the animal is entered in the stud book, or will duly appear in the next volume.

15. Stallions may be inspected for their general merit and fitness for the purposes of the scheme. Such inspection shall be carried out by one or more Inspectors appointed by the Department. If the stallion has been to stud, evidence of his fruitfulness, and, where practicable, of the character of his stock, must be produced, if required. Inspection for general fitness, when deemed necessary, shall, as far as possible, precede veterinary examination.

16. (1.) The veterinary examination shall be carried out by one or more qualified Veterinary Surgeons, appointed by the Department.

(2.) No stallion shall be rejected as unsound unless suffering from one of the following diseases:—Cataract, Roaring, Whistling, Ringbone, Sidebone, Unsound Feet, Spavin, Curb, and Shivering.

17. The inspection for general merit and fitness and the veterinary examination of stallions may be dispensed with in cases where evidence of suitability and soundness have been sufficiently established to satisfy the Department.

The Department, however, shall have the right to inspect an accepted stallion at any time.

18. The Department cannot undertake to disclose their reasons for the non-acceptance of any stallion, but with the exceptions hereinafter mentioned the owner of any stallion in Ireland not accepted may have his case reconsidered by one or more referees appointed by the Department. Every notice of appeal must be accompanied by a fee of £5, which will be returned in the event of the appeal being upheld. Notice of appeal must be given in writing within ten days from the date of the letter of rejection.

This privilege shall not extend to cases in which stallions have been rejected on appeal in a previous year or to cases in which stallions are offered under Clause 14 (1 and 2).

19. The Department reserve to themselves the right, without assigning any reason, or without inspection or veterinary examination, to decline to place or retain on the Register any stallion for the purposes of this scheme.

No right of appeal shall lie in the case of stallions rejected under this clause.

20. A stallion owner who (a) makes, or promises to make, a gift to the owner of a nominated mare of portion of the service fee, (b) allows a nominated mare to be served by a stallion other than that originally selected by the owner of the mare, or (c) is detected in any other fraudulent practice in connection with this scheme shall have his stallion or stallions struck off the Department's Register, and shall be debarred from obtaining any future benefit under the Department's schemes. He shall also forfeit any claim in respect of monies due to him under this scheme.

NOMINATIONS OF MARES.

21. (1.) Upon consecutive dates, and at places to be first approved by the Department, exhibitions of farmers' mares shall be held in each county for the purpose of awarding nominations.

(2.) Wherever practicable, and in order to avoid unnecessary expense, two exhibitions shall be held on one day at two centres, i.e., one in the morning and one in the afternoon.

(3.) The County Committee shall give due notice to farmers in the county of the dates, etc., fixed for such exhibitions by means of posters, advertisements in the local newspapers, circulars, or such other method as may be deemed by the Committee to be the most effective and economical for the purpose.

(4.) The Secretary must send to the Department two copies of each such poster, advertisement, circular or other notice as soon as issued.

(5.) The Secretary shall receive entries for each exhibition on forms to be obtained from him. Each form must be signed by the owner of the mare, who must certify on the form that all the particulars given thereon are correct. Further, if required, this certificate must be attested by a magistrate.

(6.) Mares to receive nominations must be the *bona-fide* property of farmers resident in the county (with the exception of the case provided for in No. 9 of this clause).

(7.) In order to secure the second of the main objects stated in Clause 1 of this scheme, preference will be given to the best young mares under six years of age.

(8.) Each mare must be the *bona-fide* property of a farmer, the tenement valuation in aggregate of whose holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Subject to such conditions as may be prescribed by the Department, herds' mares will be eligible to compete for nominations.

(9.) A farmer who holds land in more than one county may apply for a nomination in any one of these counties provided the aggregate tenement valuation of the holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed under (8.) for the county in which he proposes to compete.

(10.) Mares shall be selected by a judge or judges appointed by the Department, and must be passed free from any hereditary disease by a Veterinary Surgeon appointed for that purpose by the Department. The decisions of the judge or judges and of the Veterinary Surgeon as to the suitability and soundness respectively of mares for nominations will be conclusive.

(11.) At each local exhibition all eligible mares not selected for nominations shall be placed on a reserved list in strict order of merit.

(12.) No farmer shall receive more than one nomination, unless the number of mares selected and reserved be insufficient for the granting of the full number of nominations allotted to the county, in which case a second nomination may be awarded.

(13.) Owners of registered stallions have a right to require bobbles to be used.

(14.) Owners of registered stallions may refuse service to mares suffering from a contagious disease; but the reasons for such refusal must be intimated immediately to the Department and to the County Committee by the stallion owner. Mares can be served only at their owners' risk.

22. The County Committee, with the approval of the Department, may—

(1.) subject to the provisions of Clause 10, restrict nominations to any one or more of the breeds of stallions on the Register;

(2.) refuse a nomination for any mare, without assigning any reason therefor;

(3.) for the purpose of identification, brand all mares selected for nominations;

(4.) require the owner of each nominated mare to deposit a sum not exceeding £2, such deposit to be refunded if the mare is served by the selected stallion or to be forfeited to the Committee in the event of the owner failing without sufficient cause to have the mare served by such stallion;

(5.) make regulations which will render a farmer who, without sufficient cause, fails to send his nominated mare to the selected stallion, ineligible to enter mares for nominations in subsequent years; and

(6.) make regulations in regard to any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. (1.) The lists of owners of mares selected for nomination and of mares reserved must be submitted to the Department by the Secretary, within six days after the date of the last exhibition in the county, on the form supplied for the purpose.

(2.) The dockets for the selection of stallions and the service tickets will be supplied to the Secretary, when such form, complete, has been received by the Department. The selection dockets and service tickets shall then be filled in by the Secretary, who shall return them to the Department for the necessary check and authorisation for issue.

(3.) The Secretary, before issuing the selection docket, shall date it.

(4.) The service ticket must not be issued by the Secretary until the

owner of the mare has returned to him the selection docket with the name of the selected stallion duly entered thereon by the said owner.

(5.) Not later than the 10th day of August, 1912, the Secretary shall forward to the Department, on the form provided for the purpose, particulars regarding the distribution of such tickets.

25. (1.) A farmer receiving a nomination must select one of the approved stallions in Ireland of the breed named by the County Committee under Clause 22 (1), provided the service list of the stallion selected is not already full. See Clause 26 (2).

(2.) Such farmer must insert on the selection docket the name of the stallion by which he wishes to have his mare served and must return said docket so as to reach the Secretary not later than sixteen days from the date of issue of such docket.

He must also transmit with the docket the amount of the deposit, if any, fixed by the County Committee under Clause 22 (4).

26. In any one of the following cases the nomination shall be forfeited and shall lapse :—

- (1.) If the farmer to whom a nomination is issued should fail to select a stallion within the sixteen day limit.
- (2.) If the owner of the mare is also the owner of the stallion selected.
- (3.) If the farmer to whom a nomination is issued should permit his nominated mare to be served by a stallion other than that originally selected.
- (4.) If the nominated mare should die before first service.
- (5.) If the nominated mare should be sold before the date of the first service.
- (6.) If the nomination has been obtained through any misrepresentation.

The Secretary shall cancel and return to the Department the numbered tickets for all such lapsed nominations, and may issue to the owners of mares strictly in the order in which they appear on the reserve list new tickets to be obtained from the Department in lieu of such cancelled tickets.

27. A nomination is not transferable, and is available only for the selected mare.

28. The service season shall be reckoned to begin on the 1st day of March, 1912, and to terminate on the 31st day of July, 1912.

29. The value of the nomination shall be uniform for the county, but may vary with the breed of stallions selected, and shall be not less than £2, nor more than £3.

30. (1.) When the service fee exceeds the value of the nomination, the excess shall be paid by the owner of the mare to the owner of the stallion at the time of the first service, or at such other time as may be agreed upon between them.

(2.) The owner of the mare shall pay a groom's fee of 2s. 6d. for each nominated mare.

31. (1.) Not earlier than the 1st August, 1912, and not later than the 1st October, 1912, the owners of stallions shall forward to the Secretary the selection dockets and the service tickets for the services effected by their stallions, accompanied by a statutory declaration to the effect that the conditions of service have been duly complied with.

(2.) The form of declaration required under this clause may be had on application to the Secretary.

(3.) The Secretary shall examine and check all these documents, and when certified by him as correct shall forward them to the Department.

(4.) Payment of nomination fees to owners of stallions shall not be made until the Department have been satisfied as to the fulfilment of the conditions of this scheme, and have signified in writing their approval of each particular payment.

32. No payment shall be made in any of the following cases—

- (1.) Where any erasure or alteration appears on either the selection docket or the service ticket.
- (2.) Where both the selection docket and the service ticket bearing corresponding numbers are not produced.
- (3.) Where a nomination issued in respect of a particular nominated mare is used for another mare, whether nominated or not.
- (4.) Where service has been effected by a stallion other than that originally selected.
- (5.) Where an owner who received a nomination failed to send his mare for service.
- (6.) Where the owner of a stallion fails without reasonable cause to lodge by 1st October, 1912, with the Secretary, in the manner provided in Clause 31, his claim for payment of nomination fees.

33. A mare owner who (a) accepts, or agrees to accept, from a stallion owner, portion of the service fee, (b) changes nominations, (c) substitutes mares, (d) enters one or more mares for nomination in the name of another person, or causes or permits his mare to be so entered, and (e) any person detected in any other fraudulent practice in connection with those regulations shall, in addition to any other penalty to which he may be liable by law, be debarred from obtaining any future benefits under the Department's schemes.

34. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

Scheme No. 2.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS OF CATTLE.

1912.

1. The main objects of this scheme are to improve the dairy and store cattle in Ireland by encouraging the breeding or introduction of pure bred bulls or registered dairy bulls of a high degree of excellence and by inducing associations of farmers or persons of means to purchase high class bulls for the use of small farmers. When arranging the details of the scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of cattle in a county will depend on—(1) the amount of money provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (6) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply, or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided

locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, details of all schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department; but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely in providing premiums for bulls.

9. In exceptional circumstances the Department may, under certain conditions to be prescribed by them, provide for a county either by purchasing bulls on behalf of applicants selected by County Committees under Clause 17, or by granting loans to approved applicants who desire to purchase bulls through the Department.

Applications for loans under this clause should be made—by the selected individuals—directly to the Department not later than 1st March, 1912.

10. Subject to the approval of the Department, premiums may be restricted to one or more breeds of pure bred bulls or registered dairy bulls.

11. Only bulls entered or qualified by pedigree for entry, in the herd books of their respective breeds, or in the Department's Register of Dairy Cattle, shall be eligible for premiums. The owner of a pure bred bull not entered must, if required, produce a certificate from the secretary of the herd book to the effect that the bull is eligible for entry and will duly appear in the next volume. (See Clause 16 (2).) In the case of a registered dairy bull a certificate from the Department must be produced.

12. Bulls of the following ages are eligible to compete for premiums:—

- (1.) Yearlings, calved between 1st September, 1910, and 1st May, 1911;
- (2.) Two-year-olds, calved between 1st September, 1909, and 31st August, 1910;
- (3.) Three-year-olds, calved between 1st September, 1908, and 31st August, 1909;
- (4.) Four-year-olds, calved between 1st September, 1907, and 31st August, 1908.

All bulls must show a high degree of excellence. Two-year-olds, three-year-olds, and four-year-olds which show signs of having been badly cared, or which are not fully developed, will not be selected.

The Department will be prepared to consider applications in a limited number of special cases for the award of premiums to five-year-old bulls.

13. The amount of a premium for a high-class pure bred bull (other than a Galloway, Kerry, Dexter, Welsh, or Ayrshire bull) payable, subject to the regulations of this scheme, at the end of the season shall be not less

than £10 nor more than £15. Where special provision for the use of Galloway, Kerry, Dexter, Welsh, and Ayrshire bulls is made with the approval of the Department, the value of the premium shall be £10. In the case of registered dairy bulls the premium shall be £10.

14. The owners of two-year-old, three-year-old, and four-year-old bulls applying for premiums under this scheme must, if required, produce evidence of the fruitfulness of the bulls in the preceding year.

15. (1.) Bulls which were awarded premiums in 1911 will be inspected by the Department prior to the spring shows and sales, at places and on dates of which the owners will be duly advised by the Department.

In no case will an animal be inspected at the owner's residence.

(2.) Owners of such bulls failing to present their animals for inspection on the dates thus notified will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of bulls which have been passed under this clause as eligible for premiums in 1912.

(4.) The County Committee shall then proceed to select applicants for premiums for bulls to be selected at any of the shows or sales approved by the Department. In making such selections the Committee shall have regard to the needs of the various districts in the county; provided that no two bulls of the same breed shall be located in the county within three miles of each other.

(5.) A bull provisionally selected for a premium under this clause must stand for service at the same place as in 1911, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling bull.

16. (1.) Bulls, of the ages specified in Clause 12, other than those referred to in Clause 15 (3), shall be selected at the approved spring shows and sales. The provisional selection of bulls for premiums at these shows and sales shall be made by the Department alone.

(2.) Only those pure bred bulls will be inspected for premiums the owners of which have given a written undertaking to the effect that when so required by the Department they will have their provisionally selected bulls duly entered in the herd books of the respective breeds.

(3.) Intending purchasers must make their own selections from the animals passed by the Department.

17. (1.) The County Committee shall, by means of advertisements in the local papers or by posters, invite applications from persons who, if selected, are prepared to keep in districts not provided for in Clause 15 premium bulls to be purchased or exhibited at one or other of the approved shows or sales. Such applications must be made on forms to be obtained from the Secretary.

(2.) A list of such applicants, when selected by the County Committee, shall be forwarded to the Department by the Secretary, on the form provided for that purpose, not later than five days before the show or sale at which the bulls are to be selected.

(3.) The Department's Inspector or Inspectors will attend at the approved shows and sales. They shall not be empowered to recognize applications from any persons attending the shows or sales whose names are not on the list supplied by the Secretary as having been duly selected to keep premium bulls.

(4.) Applicants selected by a County Committee exhibiting or purchasing at one of the approved shows or sales provisionally selected bulls of the breeds approved by the County Committee need not again show these bulls in 1912 for a premium. The granting of a premium to a bull shall not in any way be regarded as affording a right to a premium in a subsequent year.

(5.) As soon as a selected applicant has procured a bull which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter for the purpose. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as

to location, etc., of the bull, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The service season for a premium bull shall not commence until the owner of the bull has notified the Secretary on the form mentioned in clause 17 (5) that he has procured a bull.

The service season for premium bulls shall close on 31st December, 1912.

19. The Secretary shall supply the owner of each premium bull under this scheme with posters, which such owner must undertake to distribute in the district in which the bull is to serve.

20. Each premium yearling bull shall serve not less than thirty cows, and all other premium bulls not less than forty cows each, other than those that are the property of the owner of the bull. The service fee for the number of cows stated shall be 1s. each, inclusive of all charges, but the County Committee may, if they think fit, fix the service fee at 2s. 6d. per cow, inclusive of all charges, in the case of farmers whose valuation exceeds the minimum limit fixed by the Committee. After the minimum number of cows has been served, the owner may fix such fee as he may desire.

21. The County Committee, with the approval of the Department, may make such regulations as they think necessary with regard to—

(1) the inclusion or otherwise of four-year-old bulls,
 (2) requiring applicants for premiums to deposit with their application a sum not exceeding £2 in respect of each bull—such deposit to be refunded in case the applicant is not selected by the County Committee or if he procured a premium bull. At the discretion of the County Committee the deposit so made may be forfeited in the event of the selected applicant failing to procure a premium bull.

(3) the number of premium bulls which any one person may keep, provided that no person shall possess two premium bulls unless located at least three miles from each other (see Clause 15 (5),

(4) the place at which a premium bull shall remain during the season for service (see Clause 15 (5),

(5) requiring the owner of a premium bull not to keep any other bull on the farm on which such premium bull is located,

(6) the penalties to be imposed upon the owner of a premium bull who fails to take proper care of the animal,

(7) the number of cows which any one farmer may send to a premium bull,

(8) requiring owners of premium bulls to exhibit their animals at one of the shows subsidised by the County Committee.

(9) requiring owners of premium bulls to retain their animals in the district until 1st September, 1912,

(10) cancelling the award of a premium to a bull which is sold out of the country before it has served the prescribed number of cows,

(11) the exclusion of pedigree cows from this scheme,

(12) requiring selected applicants to purchase such premium bulls only as are certified to have passed the tuberculin test, and

(13) any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

22. Each cow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding or holdings, wherever situated and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans and *bona fide* agricultural labourers may obtain service for their cows on the same terms as farmers.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. The owner of a premium bull shall not, before the stipulated number of cows has been served, reserve the use of the bull for cows the property of any individual or of the members of any society. He must, subject to the provision of Clause 29, allow the bull to serve cows in the order in which they are presented.

25. The Department reserve the right to brand or mark premium bulls, and to inspect them from time to time.

26. The Department also reserve the right to apply the tuberculin test, at their own expense, to any premium bull. See Clause 21 (12).

27. The owner of each premium bull must satisfy the County Committee that a syringe and disinfecting materials have been regularly used on the bull after each service, in accordance with the instructions given in the Department's leaflet No. 13, on Contagious Abortion in Cattle.

It will be the duty of the Secretary to obtain this information for the Committee, and to notify the Department at an early date of the results of his inquiries.

It will also be the duty of the Secretary to arrange that the owner of each premium bull shall distribute among owners of cows in his district a number of copies of the Department's leaflet No. 13.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of the bull being unable from any cause to complete the prescribed number of services, the Department reserve the right to withhold the premium or any part of it, or in any other way to deal specially with the case, as the circumstances may require.

29. The owner of a premium bull has the right to refuse the use of his bull in any case where he is satisfied that the service would be prejudicial to the animal. The reasons for such a refusal, however, must, immediately on the refusal of the application, be communicated to the County Committee, who may take such action as they think fit subject to the approval of the Department.

30. (1.) Not earlier than 1st September, 1912, and not later than 15th January, 1913, the owner of each premium bull shall forward to the Secretary on the prescribed form the return of the names, addresses, and valuations of the persons whose cows have been served by the bull—together with dates of such services—at the fee named in Clause 20.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme the Secretary will be notified that payment of the premium or part of the premium payable under this scheme may be made to the owner of the bull.

(4.) Any premium not applied for on or before 15th January, 1913, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

Scheme No. 3.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS OF SWINE.

1912.

Clauses 1 to 7, inclusive, of the Department's Horse and Cattle Schemes, 1912, shall, with the necessary modifications, apply to this scheme.

SWINE.

8. The system to be adopted in connection with this scheme for encouraging improvement in the breeds of swine shall be the provision of premiums for selected boars.

9. Subject to the approval of the Department premiums may be re-

stricted to one or more of the following breeds of swine, viz. : Large White York, Large Black, Large White Ulster.

10. Only boars eligible for entry in the Herd-books of their particular breeds, in the Register of Pigs of the Royal Dublin Society, or in the Register of Ulster Swine established by the Royal Ulster Agricultural Society, shall be eligible for premiums. The owner of a boar selected for a premium must, if required by the Department, have the animal entered in the proper Herd-book or Register as the case may be.

11. Boars belonging to any Society or to any Association of Farmers shall be eligible to compete for premiums ; but the premiums shall be paid to the Society or Association, and not to the individuals in whose charge the boars are placed.

12. A boar when inspected for the first year's premium shall be not less than five months nor more than twelve months old. The granting of a premium to any boar shall not be regarded as affording any right to a premium in a subsequent year.

13. The value of a premium shall not exceed £5 for the first year, and £3 for the second year.

14. Only those boars which were awarded first year premiums in 1911 shall be eligible for second year premiums in 1912. All such boars must show a high degree of excellence. Two-year-old boars which show signs of having been badly cared for or are not fully developed will not be selected.

The owner of a boar selected for a second year premium must produce evidence of the fruitfulness of the boar in the preceding year.

15. A boar which may be awarded a premium in 1912 out of funds administered by any other body shall not be eligible for a premium under this scheme.

16. (1.) Boars which were awarded first year premiums in 1911 will be inspected by the Department at places and on dates of which the owners will be duly advised by the Department.

(2.) Owners of such boars failing to produce their animals for inspection on the dates thus notified will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of boars which have been passed under this clause as eligible for premiums in 1912.

(4.) The County Committee shall then proceed to select applicants for premiums for young boars. In making such selection the Committee shall have regard to the needs of the various districts in the county, provided that no two boars shall be located in the county within three miles of each other.

(5.) A boar provisionally selected for a premium under this clause must stand for service at the same place as in 1911, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling boar.

17. (1.) The County Committee shall by means of advertisements in the local papers or by posters, invite applications from persons who, if selected, are prepared to keep premium boars in districts not already provided for under Clause 16 of this scheme. Such applications must be made on forms to be obtained from the Secretary.

(2.) As soon as a selected applicant has procured a boar which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to the location, etc., of the boar, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The provisional selection of boars for premiums will be made by the Department alone at the approved spring shows and sales and at other places to be fixed by the Department but, save in exceptional circumstances, no inspection for the purpose of this scheme will be made after the 30th June, 1912.

19. The Department, through the County Committee, will as far as

practicable assist intending purchasers to secure suitable boars for the purposes of this scheme.

20. The service season for a premium boar shall not commence until the owner of the boar has notified the Secretary on the form mentioned in Clause 17 (2) that he has procured a boar. The service season for premium boars shall close finally on the 31st December, 1912.

21. The Secretary shall supply the owner of each premium boar under this scheme with posters, which the said owner must undertake to distribute in the district in which the boar is to serve.

22. Each first year premium boar must serve not less than 30 sows, and each second year boar not less than 40 sows, other than those that are the property of the owner of the boar. The service fee, inclusive of all charges for this number of sows, shall not exceed 1s. for each sow. After the minimum number of sows has been served, the owner of the boar may fix such fee as he may desire.

23. The County Committee, with the approval of the Department, may make such regulations as they think necessary with regard to—

- (1.) the breed or breeds of boars to be selected see (Clause 9),
- (2.) the number of premium boars which any one applicant may possess (provided no person shall possess two premium boars unless located at least three statute miles from each other),
- (3.) the place in which the premium boar shall remain during the season for service (see Clause 16 (5)),
- (4.) requiring the owner of a premium boar not to keep any other boar on the farm on which such premium boar is located,
- (5.) the penalties to be imposed upon the owner of a premium boar who fails to take proper care of the animal,
- (6.) the number of sows which any one farmer may send to a premium boar under this scheme,
- (7.) requiring owners of premium boars to exhibit their animals at one of the shows subsidised by the County Committee,
- (8.) requiring owners of premium boars to retain their animals in the district until 1st September, 1912, and
- (9.) any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

24. Each sow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Herdsmen, artisans, and *bona fide* agricultural labourers may obtain service for their sows on the same terms as a farmer.

25. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

26. The owner or owners of a premium boar shall not, before the stipulated number of sows has been served, reserve the use of the boar for sows the property of any individual, or of the members of any society. Subject to the provisions of Clause 29, sows must be served by a premium boar in the order in which they are presented.

27. The Department reserve the right to brand or mark premium boars and to inspect them from time to time.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of a boar being unable, from any cause, to complete the prescribed number of services, the Department reserve the right to withhold the premium, or any part of it, or in any other way to deal specially with the case, as the circumstances may require.

29. The owner of a premium boar has the right to refuse the use of his boar in any case where he is satisfied that the service would be prejudicial to the animal. The reason for such refusal must, however, be communicated to the County Committee immediately on the refusal of the application.

30. (1.) Not earlier than 1st August, 1912, and not later than 15th Jan.

uary, 1913, the owner of each premium boar shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose sows have been served by the premium boar—together with dates of such services—at the fee named in Clause 22.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary will be notified that payment of the premium, or part of the premium, payable under this scheme may be made to the owner of the boar.

(4.) Any premium not applied for on or before the 15th January, 1913, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

Scheme No. 4.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

LOANS FOR THE PURCHASE OF STALLIONS.

1912.

1. Applications for loans for the purchase of Stallions must be made—on the prescribed form (A. 37)—direct to the Department.

2. No application for a loan for the purchase of a Stallion will be considered if coming from a locality in which, in the opinion of the Department, there is already a sufficient number of approved Stallions for the purpose of their scheme.

No loans will be made save for the purchase of Stallions accepted by the Department under the Horse-breeding scheme for 1912.

The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The individual or association (hereinafter referred to as the applicant) applying for a loan must be approved by the Department.

4. The purchase price of the Stallion must be approved by the Department.

5. The applicant must pay to the Department (1) one-third of the approved purchase price, (2) the amount of the stamp duty, and (3) the premium for the insurance of the Stallion against death only at the full amount of the approved purchase price—the payment to the Department of this premium must be secured under conditions similar to those provided for the repayment of principle and interest. (*See 7 and 8.*)

6. On receipt by the Department of (1) one-third of the agreed on purchase money, (2) the necessary stamp duty, (3) the premium for insurance, and (4) a form of undertaking to have the necessary bond duly completed without delay, the Department will pay to the vendor the full amount of the agreed on purchase price, and will intimate to him that possession of the Stallion may be given up to the applicant.

If the vendor, before being paid by the Department, gives up possession of the Stallion, the Department will hold themselves free of any liability to the vendor.

7. As soon thereafter as possible the applicant, with two or more approved solvent sureties, shall enter into a bond to repay the Department the amount which will be advanced by them—viz., two-thirds of the purchase money—in five equal annual instalments, payable on the 1st November in each year, together with interest at the rate of 2½ per cent. on the outstanding balance. The first instalment shall be payable on the 1st November

next succeeding the date of payment by the Department of the full purchase price to the vendor.

8. In the case of an association repayment must be guaranteed by the Committee of the association, or in such other manner as the Department may require.

9. The Stallion shall not be sold or otherwise disposed of without the consent of the Department having been previously obtained in writing, until all instalments of principal and interest are paid off in accordance with Clause 7, and in any case not earlier than after the expiration of five years from the date of sale to the applicant. In the event of the applicant contrary to the provisions of this clause selling or otherwise disposing of the Stallion he shall pay to the Department as and for liquidated damages such sum as may be named in the bond by the Department, without prejudice to the Department's right to recover with interest the unpaid instalment or instalments of the price of the Stallion.

10. The applicant must offer the Stallion each year for registration, must undertake to conform at all times to the regulations of the Department's scheme for the time being for encouraging improvement in the breeds of horses, and, during the continuance of the loan, must allow the Stallion to serve nominated mares at a fee to be fixed by the Department.

Such fee, however, shall in no case exceed £3 per mare.

11. Nominated mares the property of the members of an association purchasing a Stallion under this scheme shall not take priority of service over nominated mares owned by non-members.

As soon, however, as all nominated mares whose owners have selected the Stallion have been served, the service of the Stallion may be retained exclusively for the use of the members of such association.

12. The applicant must observe the following conditions:—

(1.) In the event of the horse becoming ill or lame, he must without delay give notice in writing or by telegram to the Department. Like notice must be given—

(a) If the horse meets with any accident or injury, and

(b) If the horse dies. In the latter event he must furnish at his own expense a certificate from a Veterinary Surgeon.

(2.) He must provide proper accommodation for the Stallion, and care it in a proper manner to the satisfaction of the Department.

(3.) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

13. The Department shall have the right to inspect the Stallion at any time.

14. Should the Department grant a special subsidy in respect of the Stallion such subsidy shall not be paid to the individual or association in possession of the Stallion, but shall be credited, after the close of the season, towards the repayment of the loan.

15. The decision of the Department in all matters relating to these loans shall be final.

Forms of application can be had from the Department.

Scheme No. 5.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

LOANS FOR THE PURCHASE OF BULLS.

1912.

1. Applications for loans for the purchase of Bulls should be made—on the prescribed form (A. 38)—direct to the Department before 1st March, 1912.

2. No application for a loan for the purchase of a Bull will be considered if coming from a locality in which, in the opinion of the Department, there is already a sufficient number of premium Bulls for the purpose of their scheme. No loan will be granted save for the purchase of a pure bred Bull passed by the Department as suitable for a premium. The Bull must be of a breed approved by the County Committee. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The purchase price of the Bull must be approved by the Department.

4. The person applying for a loan under this scheme—hereinafter referred to as 'the applicant'—must purchase through the Department, who cannot undertake to consider applications for loans in respect of animals purchased without their knowledge, at shows, sales, or from private individuals. The Department will, as far as possible, endeavour to procure a suitable animal for the applicant, but they cannot undertake to supply a Bull at a price fixed by him.

5. Before taking possession of the Bull the applicant will be required to pay to the Department's representative—(1) one-third of the approved purchase price, (2) the stamp duty, and (3) the charge for insurance against death of Bull (see Clause 9). Further, he must sign a form of undertaking to have the necessary form of guarantee for repayment duly signed and completed.

6. As soon thereafter as possible, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount which will be advanced by them in two equal annual instalments, payable on the 1st day of April in each year, the first instalment to be payable on the 1st day of April in the year following that in which the Bull was purchased, together with interest at the rate of $2\frac{1}{2}$ per cent. on the outstanding balance.

7. In the case of an association the person in whose charge the Bull is to be placed must, with two other approved members of the association in their capacity of private individuals, guarantee repayment of the loan.

8. The Bull shall not be sold or otherwise disposed of without the consent of the Department having been previously obtained in writing, until all instalments of principal and interest are paid off in accordance with Clause 6; and in any case not earlier than until the expiration of two years from the date of sale to the applicant. In the event of the applicant contrary to the provisions of this clause selling or otherwise disposing of the Bull he shall pay to the Department as and for liquidated damages the sum of £10 without prejudice to the Department's right to recover with interest the unpaid instalment or instalments of the price of the Bull.

9. The applicant must insure the Bull against death only with the Department for the full amount of the purchase price. The fee for such insurance shall be 5 per cent. on the full amount of the purchase price, and shall be paid to the Department.

10. The Department will insure the Bull with an insurance company for twelve months only from the date of payment of the insurance fee by the applicant. In the event of the death of the Bull before the expiration of the twelve months in question the loan will be cleared off and the applicant will be refunded the part of the purchase price which he deposited with the Department on getting possession of the Bull, less interest on loan to date of death of the Bull.

It will be optional with the applicant to insure the Bull for a second year.

11. The applicant must observe the following conditions:—

(1.) In the event of the Bull getting ill or lame he must, without delay, give notice in writing or by telegram to the Department. Like notice must also be given (a) in the event of any accident or injury occurring to the Bull, and (b) in case of the death of the Bull.

(2) He must take all reasonable precautions to prevent the Bull from coming into contact with any animal suffering from disease.

(3.) He must provide proper accommodation for the Bull and care it in a proper manner, to the satisfaction of the Department.

(4.) He must procure at his own expense a syringe and disinfecting materials and use same for the washing of his Bull after each service, in accordance with the instructions given in the Department's leaflet No. 13 on contagious abortion in Cows.

(5.) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

(6.) In the case of the death of the Bull he must forward a certificate from a Veterinary Surgeon or such other evidence as to the cause or fact of death as the Department may require.

12. The granting of a loan does not imply that a premium will be awarded in respect of the Bull.

Should the Bull be awarded a premium (1) the person in whose favour the loan is being granted must conform to the regulations of the Department's scheme for the improvement of the breeds of cattle, or any modifications therein made, with the approval of the Department, by the County Committee; and (2) the amount of such premium shall be paid to the applicant, after the provisions of the general scheme have been complied with.

13. The Department shall have the right

(a) to inspect the Bull at any time;

(b) to brand or mark the Bull;

(c) to apply the tuberculin test, at their own expense, to any Bull purchased under this scheme.

14. The decision of the Department in all matters relating to these loans shall be final.

Forms of application can be had from the Department.

Scheme No. 6.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SUBSIDIES TO AGRICULTURAL AND INDUSTRIAL SOCIETIES, ETC.

1911-1912.

1. County Committees of Agriculture may, subject to the approval of the Department and to the conditions of this scheme, grant subsidies to societies established for the purpose of—

(a) Holding Agricultural, Poultry, Horticultural, and Farm Produce Shows; Industrial Shows or Exhibitions and Fairs; Skilled Labour Competitions, Implement Trials, Ploughing Matches, etc.

Provided, however, that the grant to any one Ploughing Match shall not exceed £5, irrespective of the number of competitions at such Match.

(b) Obtaining for its members Analyses of Manures and Feeding Stuffs, Seed Tests, etc.

2. (1.) A show society or other body, desiring to obtain a grant under this scheme must make application on the prescribed form not later than 1st February, 1912, to the County Committee, and must at the same time furnish the following particulars in respect of each show held by the society in 1911, viz. :—

(a) A balance sheet duly certified to have been audited and found correct by two persons not being members of the committee of the show society or other body concerned, and setting forth in detail the financial position of the society after all liabilities have been discharged, and also

- (b) If required, a list certified by the Secretary of the show society or other body, setting forth the amounts actually collected in local subscriptions from private individuals in 1911.

Any Society or other body which fails to furnish these particulars, or such further information as the County Committee or the Department may require, shall not be eligible to receive a subsidy.

(2.) It shall be the duty of the Secretary of the County Committee, by means of advertisement or otherwise, to invite applications in accordance with the provisions of this scheme, from all societies or other bodies concerned, and to submit same with the necessary particulars to the County Committee as soon as possible, but not later than at a meeting of the Committee held in the month of February, 1912.

(3.) Not later than 1st March, 1912, the County Committee shall forward to the Department the foregoing documents, together with their recommendations as to the distribution of funds available under this scheme.

3. In allocating the funds available under this scheme, County Committees should consider the claims of the various Shows held in the county and the special requirements of particular districts.

The County Committee in allocating a grant to any particular show shall take into consideration:—

- (1.) The amounts actually collected in local subscriptions from private individuals in 1910 and 1911.
- (2.) The total value of prizes awarded in 1911, and the cost of administration.
- (3.) The regard paid by the society to the furtherance of the Department's live stock, poultry, and other county schemes.
- (4.) The amount set aside for classes confined to small farmers.

4. (1.) The prize schedule for 1912 must, prior to publication, be submitted *in duplicate* through the County Committee to the Department for approval in writing.

(2.) It shall be a condition attached to any grant from the joint fund that stallions which are entered on the Department's Register for the current year shall be exempted from veterinary examination when competing either in reserved or in open classes at a show subsidised by a County Committee.

(3.) In the case of certain show societies to be approved by the Department and the County Committee, portion of the grant from the joint fund shall be utilised in providing classes for Irish Draught mares on the Department's Register, and for the progeny of such mares by registered Irish Draught stallions.

(4.) In the case of live stock shows, other than shows confined to horses, provision must be made in the schedule of prizes for the inclusion of classes for sheep and swine and for poultry of the breeds subsidised by the County Committee.

In dairying districts show societies should make special provision for classes for registered dairy cows and their progeny.

The Department will not consider any schedule which has not previously received the approval of the County Committee.

5. The amount of the joint contribution from the County Committee and the Department must be acknowledged in the prize schedule.

6. Each society receiving a subsidy under this scheme shall, if required, afford all reasonable facilities for the inspection of their books by the Department, and shall admit the Department's Inspectors to the judges' rings during all adjudications on the day of the show.

7. Grants from the joint fund available under this scheme may be given to new show societies, provided the County Committee and the Department are assured:—

- (1.) That there is need for such new societies in the county;
- (2.) That adequate local support is forthcoming; and
- (3.) That the rules and financial proposals of the society are deemed satisfactory.

8. The cost of employing judges must be defrayed by show societies out of their own funds. The Department cannot undertake to supply the services of a judge or demonstrator for any show or competition.

If the County Committee approve, one or more of the Instructors employed under county schemes may be permitted, for the purpose of giving demonstrations, to attend a show subsidised by a County Committee.

9. (1.) Immediately after the show or competition the Secretary of the Society or other body shall furnish to the County Committee a certificate as to the total amount actually awarded in prizes, exclusive of cups and presentation prizes (the value of which should be stated separately), and the County Committee shall forward such certificate to the Department.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the County Committee will be notified that payment may be made to the show society or other body of the full amount of the subsidy or part of the subsidy as the case may be.

(3.) In the event of the total sum actually awarded in prizes at any show or competition being less than the sum originally voted by the County Committee, the show society or other body managing the show or competition shall not be entitled to receive payment from the joint fund of any sum exceeding the amount actually awarded in prizes, exclusive of cups and presentation prizes.

10. Non-compliance with any of the foregoing regulations will render a show society or other body ineligible for a grant under this scheme, and will entail the cancellation of any subsidy proposed to be given by the County Committee to such show society or other body.

11. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

The Department recommend that each Agricultural or other Show Society receiving a subsidy under this Scheme should invite the County Committee to nominate one or more representatives to act on the Show Committee.

Scheme No. 7.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

PRIZES FOR COTTAGES AND SMALL FARMS, 1912.

1. In 1912 County Committees of Agriculture may, subject to the Department's approval, offer prizes in one or both of the following sections, subject to the provisions of this scheme, viz. :—A. Cottages with gardens ; B. Small Farms.

In Section A County Committees may offer prizes in any one of the following ways :—(1) wholly in cash, (2) wholly in fruit trees and seeds, (3) partly in cash and partly in fruit trees and seeds.

A County Committee may delegate the working of this scheme to a society eligible for a grant under the scheme of subsidies to agricultural and industrial societies.

2. Competition in Section A shall be confined to *bona fide* cottagers as defined by the County Committee. Cottagers on whose holdings demonstration plots in connection with the scheme of instruction in horticulture are situated, shall, however, be ineligible to compete.

Only *bona fide* farmers who derive their means of living mainly from farming, who reside on their farms and work the farms themselves, will be eligible to compete in Section B. At least one-fourth of the arable land of the entire holding of each competitor in this section must be tillage, first year's grass or meadow being regarded as tillage.

Teachers in National or other primary schools are ineligible to compete under this scheme.

3. For the purposes of this scheme the county may be divided into districts or circuits, in each of which separate competitions will be held.

4. Particulars as to the sections adopted, the number of districts or circuits into which the county is divided, the number of classes in each section, the limits of valuation or acreage fixed by the County Committee for each class, and the number and value of the prizes offered, must be submitted to the Department on the prescribed form for approval.

5. Entries must be made on special forms to be obtained from the Secretary of the County Committee. Each competitor must forward one of these forms, accurately filled up in every detail, so as to reach the Secretary of the County Committee on or before a date to be fixed by the County Committee, but in no case later than the 20th May, 1912.

No holding will be inspected in respect of which the owner fails to fill in an entry form.

It shall be the duty of the County Committee to examine these entry forms and to satisfy themselves, as far as practicable, as to the eligibility of each entrant before the list of competitors is supplied to the judge.

6. In cases of insufficient competition, want of merit, or in which the conditions of this scheme have not been strictly adhered to, the prize may be withheld in whole or in part.

7. The following points shall be taken into consideration by the judge in making his awards:—

COTTAGE SECTION.

- (a.) Cleanliness and general order of cottage and premises.
- (b.) Cultivation of the garden, freedom from weeds, well-kept fences and walks.
- (c.) Variety of vegetables, fruits, and flowers.
- (d.) Arrangement of manure heap.
- (e.) General management and care of live stock, particularly pigs and poultry, special attention to be given to quality and housing.
- (f.) Management of bees.

SMALL FARM SECTION.

- (a.) Cleanliness, order and economy in the dwelling-house and offices (including poultry houses).
- (b.) Judicious character of cropping, efficiency of cultivation, arrangement of manure heap, and provision for collecting liquid manure.
- (c.) Cultivation of the garden, variety of vegetables and fruit trees.
- (d.) general condition of land under grass, care of fences, gates, water courses, etc.
- (e.) Judicious planting of shelter belts.
- (f.) Freedom from weeds, especially grass land, stack-yards and headlands.
- (g.) Cultivation of headlands.
- (h.) Management and care of live stock and poultry (quality to be particularly considered).
- (i.) Special credit will be given if simple accounts of receipt and expenditure in connection with any holding entered for competition (or with any branch of the work on the holding, such as cost of feeding cows or pigs, of rearing calves, of keeping poultry, etc.) are kept and exhibited to the judge.

Marks may also be given for improvements in buildings, reclamation of land, or the keeping of records in connection with the Department's Dairy Cattle Scheme or Poultry-keeping Scheme.

8. The Department will supply, free of charge to the County Committee, the services of an Instructor to act as judge under this scheme.

9. The judge's report shall deal with such matters in connection with the competition as the Department and the County Committee may decide

10. The inspection of cottages or small holdings entered for competition under this scheme will be made in the months of June, July, or August.

11. The Committee shall submit the judge's report, with list of awards, for consideration by the Department, who, as soon as they are satisfied as to the fulfilment of the conditions of this scheme, will notify the Secretary of the County Committee that the prizes or reduced prizes may be paid. The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary.

12. The County Committee shall furnish to the Department such detailed statement of expenditure under this scheme as may be required from time to time.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 8.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE
FLAX-GROWING INDUSTRY.

1912.

PRIZES FOR GROWERS, &c., OF FLAX.

County Committees of Agriculture in the flax growing counties may adopt either or both of the following sections :—

(A.) Prizes for Scutched flax.

(B.) Prizes for flax on foot.

SECTION A.

For the purpose of this section a county may be divided into districts, in each of which a show of scutched flax may be held, at which it is suggested the following prizes be offered :—

(A.)—*Growers.*

First Prize	.	.	.	£3
Second Prize	.	.	.	£2
Third Prize	.	.	.	£1

(B.)—*Scutchers.*

Scutchers employed in the mill where the first prize lots were scutched :—
£2.

Scutchers employed in mills where the second prize lots were scutched :—
£1.

(C.)—*Other employees.*

For other persons employed in the mill where the first prize lots were scutched :—
£2.

Similar employees in mills where the second prize lots were scutched :—
£1.

(D.)—*Mill-owners.*

This Class may be omitted if the County Committee so desire.

Owners of mills in which the first prize lots were scutched :—
£2.

Owners of mills in which the second prize lots were scutched :—
£1.

SECTION B.

For the purpose of this section the county may be divided into districts, in each of which prizes for flax on foot may be offered, e.g. :—

(a.) For growers the valuation of whose holding does not exceed £10, and who grow at least half a statute acre of flax or sow at least $\frac{1}{2}$ bag of seed.

(b.) For growers the valuation of whose holding exceeds £10 but does not exceed £25, and who grow at least one statute acre of flax or sow at least 1 bag of seed.

(d.) For growers the valuation of whose holding exceeds £50, and who grow at least three statute acres of flax or sow at least $1\frac{1}{2}$ bags of seed.

N.B.—The limits of valuation in the foregoing classes are not prescribed; they are merely inserted as an indication to County Committees to encourage the small grower.

The County Committee may require growers entering flax for competition under this section to pay an entry fee.

When judging growing crops the judge shall take into consideration :—

(a.) Freedom of crop from weeds ;

(b.) Uniformity of crop ;

(c.) Length and quality of crop.

GENERAL REGULATIONS.

1. A County Committee adopting this scheme should appoint from among their own members a special sub-committee for flax, which should be restricted to six members, who should as far as possible be experienced flax growers or scutchmill owners ; and this sub-committee should be given full authority to administer the county scheme when sanctioned in writing by the Department.

2. The sub-committee shall be responsible for organising shows under section A, and for making all arrangements in connection with sections A and B ; but no payments under this scheme shall be authorised, except by the County Committee.

3. The County Committee shall, by means of advertisements in the local papers and by posters, invite applications on special forms from persons in the county desirous of competing for the prizes offered under this scheme. Copies of these posters must be forwarded to the Department.

4. Not less than six weeks before the date of the first show, when section A has been adopted, and not later than 31st March, 1912, in the case of section B, the County Committee must submit, for the approval of the Department, on the form provided for the purpose, a complete statement showing :—

In regard to section A—(1) the classes to be provided at each show ; (2) the quantity of flax to be exhibited by one person in each class, which should not be less than 16 stones ; (3) the number and value of the prizes to be offered ; (4) the place, suggested date, and hour of each show ; (5) the instructions to exhibitors, together with such conditions of award, in addition to the compulsory provisions in the following clauses as the Committee may consider desirable.

In regard to section B—(1) the number of districts into which it is proposed to divide the county ; (2) the limits of valuation in each class ; (3) the number and value of prizes in each class ; (4) the amount of the entry fee, if any, to be charged.

5. All growers of flax shall be eligible to compete for prizes in sections A and B, subject to the regulations of this scheme.

6. Under neither section shall a grower be paid more than one prize during the season, and under section A no individual can receive a prize both as a grower and as a mill-owner.

7. If, in the opinion of the judge, the flax exhibited under section A or the crop inspected under section B does not show sufficient merit, the prize must be withheld.

8. If it be discovered that any fraud, deception, or dishonest practice

has been committed, either in connection with the preparation or ownership of the scutched flax or growing flax, or in any representation regarding exhibits of flax—scutched or growing which may have affected, or have been intended to affect, the decision of the judge or judges, the offending person shall be disqualified, and shall be debarred from obtaining any future benefits under the Department's scheme. He shall also forfeit any claim in respect of prizes awarded under this scheme. The Department reserve the right to publish the names of such persons if deemed expedient.

9. No action shall be taken by the County Committee towards putting any portion of this scheme into operation until the sanction of the Department to the Committee's proposals has been obtained in writing. The scheme, when sanctioned by the Department, must be considered as final for the year.

10. The County Committee shall, subject to the approval of the Department, appoint a competent judge or judges under this scheme. The person appointed under section A must not be a resident in the county in which he is to act.

The person appointed under section B may act as judge in the county in which he resides, but not in the district, as defined in the scheme, in which his residence is situated.

11. (1) Not later than six days after the holding of each show the Secretary of the County Committee shall submit to the Department for approval, on the form provided for the purpose, a statement showing the name and address of each of the prize-winners under section A, and the amount of the prize to which each winner is entitled. (2) Similar returns in respect of competitions in section B should be furnished to the Department within one week after the work of judging has terminated. (3) The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary of the County Committee.

12. The Secretary of the County Committee shall keep a separate account of expenditure in connection with each section of this scheme, and shall furnish same to the Department when required.

13. The decision of the Department in all matters of dispute in connection with this scheme shall be final.

NOTE.—If an association of farmers decide to employ a flax expert the Department, on conditions to be prescribed by them, will be prepared to contribute to the cost of employing such an expert, provided a suitable person is available, and that his qualifications are considered by the Department to be satisfactory.

Scheme No. 9.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

INSTRUCTION IN AGRICULTURE, 1911-12.

1. The Department are prepared to approve the appointment of at least one Instructor in Agriculture for each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for an Instructorship in the county of which he is a native, or in which he resides permanently.

The Department will, as far as possible, assist County Committees in obtaining instructors by supplying the names of qualified persons.

2. The initial salary of the Instructor shall be £150 per annum (inclusive of maintenance and hotel expenses), in addition to expenses of locomotion, which include second or third class railway fare as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1912, and shall be terminable at any time previous to that date by the giving of three months' notice in writing on either side.

4. (1.) It will be the duty of the Instructor, who should take every opportunity of discussing with farmers matters affecting their industry, to give his whole time to the work and to do all in his power to further the interests of agriculture in the county, and in pursuance thereof—

(a) to conduct such field and live stock experiments and demonstrations as may be approved by the Department, including the selection of suitable land, the supervision of the sowing of the seeds and manures, and of the keeping of the plots free from weeds, the weighing of the produce, the tabulation of the figures, and the preparation of reports on the results ;

(b) to deliver lectures on agricultural subjects, such as soils, manures, seeds, pastures, crops and their cultivation, and the breeding, feeding, and management of live stock, especially of dairy cattle ;

(c) to visit farms ;

(d) to reply to letters from farmers seeking information ;

(e) to make known as widely as possible the facilities provided by the Department for the training of young men who intend to become farmers and, especially, to endeavour to secure the attendance of farmers sons at Winter Agricultural Classes ;

(f) to advise farmers (i.) how they can take advantage of the Department's Seed Testing Station, (ii.) as to the planting of forest trees for shelter and ornament, (iii.) how they can best avail themselves of all approved county schemes, and (iv.) how they may take advantage of agricultural co-operation ;

(g) to act as official sampler under the Fertilisers and Feeding Stuffs Act, to make known the provisions of this Act, of the Destructive Insects and Pests Acts, and of the Weeds and Agricultural Seeds (Ireland) Act ; and

(h) to furnish to the County Committee and to the Department as may be required, reports on the progress of his work and on matters relating to the agricultural industry of the county.

(2.) The Instructor may also be required (a) to assist in the teaching of winter agricultural classes, (b) to assist in carrying out the provisions of the scheme for the registration of dairy cattle, by the weighing and testing of milk, etc., and (c) to act as judge in connection with the scheme of prizes for cottage and small farms in a county other than that in which he acts as Instructor.

NOTE.—The employment of the Instructor to teach winter agricultural classes will not relieve him of his other duties under this scheme, and accordingly when he is occupied in teaching for four days in a week the Instructor should deliver at least one lecture in the same week on a day when not engaged in teaching, as well as attend as far as practicable to the other branches of work above mentioned. If occupied less than four days a week in teaching such classes, the number of lectures and demonstrations should be correspondingly increased.

5. The Instructor shall, as far as the monies allocated by the County Committee will permit, make arrangements to have experimental and demonstration plots in each section or circuit into which the county may be divided under Clause 6, and, during the summer months, meetings of farmers should be held at these plots to discuss the objects, etc., of the plots. In selecting sites for plots preference should be given to localities in which agricultural classes have been held during the preceding winter.

During the winter months—viz., from the beginning of October to the end of February—the County Committee should arrange for a series of lectures by the Instructor in each circuit. At least one lecture in each circuit should deal with the results of the experiments carried out in the previous season.

6. For the purposes of this scheme County Committees will find it convenient to divide the county into a number of sections or circuits, in which the Instructor should, as far as possible, work in turn.

When it is intended that a lecture should be given in a particular locality, the County Committee should appoint a small local committee, who should undertake to secure the necessary accommodation for the purpose and to arrange for the lighting, heating, etc., of the room in which the lecture is to be delivered. No work of this nature should be undertaken by the Instructor.

The County Committee alone are responsible for seeing that the Instructor's time is fully and usefully employed, and that he pays due regard to the performance of the duties for which he is appointed. With this end in view, the County Committee should take such steps as may seem to them most effective to make known to farmers in the county that an Instructor is available to afford advice on all matters affecting their interests.

The County Committee shall obtain the Department's approval in writing for all payments in respect of materials for experiments and demonstrations, and articles of equipment required by the Instructor, and shall keep a separate account of all expenditure under this scheme. Detailed statements of such expenditure as may from time to time be required shall be furnished to the Department by the County Committee.

7. It will be the duty of the Secretary of the County Committee to furnish such returns in connection with this scheme as the Department may require; to forward to the Department copies of all advertisements, posters, or handbills issued by the Committee; and to keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme.

8. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

9. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 10.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

WINTER AGRICULTURAL CLASSES.

1911-12.

1. The County Committee may employ as teacher for agricultural classes (1) for not more than four days per week, the Itinerant Instructor in Agriculture, if approved by the Department, or (2) an approved teacher who would devote his whole time to the classes.

In the event of the Itinerant Instructor being employed as teacher, he shall devote the remaining days of the week to duties in connection with the scheme of itinerant instruction in agriculture.

2 (1.) The aim of the instruction is to impart such knowledge as is capable of direct practical application to farm work. The subjects taught will be as follows:—Soils, tillages, manures (natural and artificial), seeds, grasses, weeds, farm pests, treatment of pasture, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, simple farm account keeping, mensuration, elementary chain surveying, and elementary science explanatory of the principles underlying ordinary farm practice. As far as possible the lessons should be illustrated by practical demonstrations.

At each centre special attention will be devoted to farm calculations

in connection with the cost of growing crops and raising stock, with direct reference to the practice prevailing in the district.

(2.) The County Committee may arrange for a few outdoor demonstrations in the planting and after treatment of fruit trees, to be given to the students by the County Instructor in Horticulture, but no lectures on horticulture shall be given.

3. (1.) Centres for the classes should be selected at the earliest possible date by the County Committee, or by a sub-committee appointed by them under Clause 6 of this scheme. Preference should be given to thickly-populated tillage districts, and no place should be selected where it appears likely that a minimum regular attendance of ten students cannot be secured. It is desirable that the Itinerant Instructor in Agriculture should be consulted as to the selection of centres, but he should not be required to undertake responsibility therefor, or for the arrangements for the organisation of the classes. Unless in exceptional circumstances, centres at which agricultural classes have been held in recent years should not be selected under this scheme.

(2.) Each class shall be held on not more than three or less than two days weekly during a period of about sixteen weeks, commencing not earlier than the 30th October, 1911, and ending not later than the 9th March, 1912.

(3.) In fixing the days of the week on which the classes are to be held at any centre, the County Committee should have regard to the dates of fairs and markets, as well as to any local circumstance which might interfere with the attendance of students on certain days.

(4.) The classes shall be held in the morning and afternoon, and the hours of attendance shall be arranged to suit, as far as possible, the convenience of students who travel by rail. Instruction in subjects mentioned in Clause 2 (1) of this scheme shall be given for at least four hours each day.

4. (1.) The County Committee shall, by means of advertisements in the local newspapers and by posters and leaflets, invite applications for admission to the classes. Copies of these posters and leaflets must be forwarded to the Department as soon as issued.

The County Committee may make such regulations as they think necessary with regard to—

(a.) the maximum age of students to be admitted to the classes ; and

(b.) the admission to classes of students who have previously attended similar classes, provided that admission to an elementary class shall not be approved in the case of any student who has attended two previous classes.

(2.) Applications for admission to the classes must be made to the Secretary of the County Committee, on forms provided by him for the purpose.

(3.) Admission to the classes will be conditional on the applicants satisfying the Department that their general education is sufficient to enable them to benefit by the instruction given, and on their undertaking to attend regularly throughout the course.

(4.) The classes shall be confined to young men over sixteen years of age, who are actually engaged in farm work in the county, and not more than twenty-four students shall be admitted at any centre. If the number of students eligible for admission at a centre is less than ten, the class proposed for that centre shall not be held. Provided, however, that, subject to the approval of the Department, the County Committee, if a sufficient number of students over sixteen years of age is not available, may, if they think fit, admit young men over fifteen years of age.

(5.) No applicant shall be permitted to join a class after the lapse of two weeks from the date of the first meeting of the class.

(6.) No fee shall be charged for the course. Students must provide, at their own expense, note-books and other stationery as directed by the teacher.

5. Students who reside beyond a radius of three statute miles from the class centre will, at the end of the course, be allowed the cost of third-class railway tickets, or one penny for each mile by which the double journey by road between their homes and their class centres exceeds six miles, provided that their attendance and progress are regarded by the Department as satisfactory. No student will be regarded as having attended satisfactorily who shall not have been present at five-sixths of the meetings of his class, unless his absence shall have been due to illness or other unavoidable cause.

Meat meals shall not be provided for students attending the classes.

6. It is recommended that a County Committee adopting this scheme should appoint, from amongst their own members, a special sub-committee of not more than six members who should be empowered to make, in consultation with the Department's Agricultural Inspector, the necessary arrangements for the organisation and holding of the classes. Particulars of the arrangements made are to be at once submitted on Form A 196 for the Department's approval. In the event of any alteration in the time table of a class being subsequently found desirable, the Department's approval for same should be applied for without delay. No payments, under this scheme, shall be authorised except by the County Committee.

7. It shall be the duty of the teacher of Agriculture to keep a register of attendance of the students on the form provided, and in the manner prescribed by the Department.

8. The Secretary of the County Committee shall—

(1.) Submit on the prescribed form, for the approval of the Department, the details of the scheme as proposed for the county ;

(2.) At the earliest possible date after the opening of the classes, furnish to the Department, on the prescribed form, a return of the students in attendance, showing for each student the mode of travelling to the class and the daily mileage ;

(3.) Obtain the Department's approval, in writing, for all payments in connection with this scheme, and keep a separate account of all such payments ;

(4.) Keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme ;

(5.) Immediately after the close of the course, take charge of the equipment provided for the classes, and furnish a list of the same to the Department ;

(6.) Submit to the Department a return of the attendance of the students and of the travelling allowances payable to them under this scheme.

9. In all matters of dispute relating to this scheme the decision of the Department shall be final.

NOTE.—(1.) If these classes are entered under the Department's revised scheme for the administration of grants to schools other than day secondary schools, the regulations of that scheme must be strictly observed.

(2.) Students of winter agricultural classes whose attendance and progress thereat have been satisfactory, receive special preference in connection with the award of agricultural apprenticeships at the Department's Agricultural Stations. Such students are exempt from the entrance examination prescribed for other applicants for these apprenticeships.

WINTER AGRICULTURAL CLASSES.

SYLLABUS OF THE COURSE.

Soils.—Brief sketch of origin and formation. Conditions influencing fertility. Soil improvement by draining, liming, etc.

Plant Life.—Study of a plant, and the functions of roots, stem and

leaves ; modification of these organs. Elements of plant food and their relative importance from an agricultural point of view. Conditions affecting the development of plants. Examination of the habits of growth and duration of the principal crops and weeds found on the farm, and the practical application of this knowledge.

Manures.—Farmyard manures ; its storage and application. Organic and artificial manures. Composition, description and identification of artificial manures ; their valuation, time and manner of application. Mixing manures. Special manures. Fertilisers and Feeding Stuffs Act.

Crops and Cropping.—Rotations. Cultivation. Seeding, Manuring and Harvesting of the principal farm crops. Forage and catch crops. Study of the commoner insect pests and fungoid diseases of crops.

Grasses and Clovers.—Characteristics, duration and adaptability for various purposes in farm practice. Identification of the different species and varieties.

Seeds.—Identification of farm seeds and the commoner impurities and adulterants. Germination and purity tests, how performed ; the inferences to be drawn therefrom. Change of seed. Grass seed mixtures. Weeds and Agricultural Seeds Act.

Live Stock.—Care and management of various classes of farm stock, with special reference to breeding, feeding and housing. Principal breeds of live stock, their characteristics and suitability for various systems of farming.

Feeding Stuffs.—Constituents of foods ; their respective functions and value in animal nutrition. Valuation, description, properties and uses of home-grown and purchased feeding stuffs. Impurities and adulterants. Rations for various classes of farm stock. Methods of using foods. Fertilisers and Feeding Stuffs Act.

Dairying.—Secretion of milk ; composition ; conditions influencing the quality and quantity of the milk yield. Care and treatment of milk for new milk trade or buttermaking. Cream ripening. Milk records. Improvement of the milking qualities of herds. Respective merits and demerits of the several systems of dairying. Summer and Winter Dairying.

Mensuration and Land Surveying.—Rules for estimating the areas of the principal geometrical figures met with in chain surveying and farm calculations. Field book ; method of entering measurements ; calculation and computation of areas. Practical work with the chain in the field. Plotting from the field book to given scales. Location of drains, etc., on the plans for future reference.

Farm Account Keeping.—Method of keeping a diary, cash book, and a record of credit transactions. Farm valuations and stocktaking. Balance sheets, their interpretation. Estimates of the cost of various farm operations, etc.

LIST OF EQUIPMENT REQUIRED AT EACH CENTRE.

- 6 Flower Pot Basins, 6 to 8 inches diameter.
- 1 piece Wire Gauze, 6 inches square.
- 6 small bottles of Chemicals, such as HCl, NaOH (these two both dilute) ;
Lime-water and Methylated Spirits.
- 12 Test Tubes.
- 1 Test Tube Stand.
- 1 Tripod.
- 2 Flasks.
- 6 Beakers.
- 6 Pocket Lenses.
- 2 Porcelain Evaporating Basins.
- 1 Glass Funnel, 6 inches diameter.
- 1 Blackboard.
- 1 Easel.
- 1 Box Chalk (also coloured chalk if desired).
- 1 Spirit Lamp.
- 60 Bottles (Glass Honey Jars, for samples of Seeds, Manures, and Feeding
Stuffs.

A couple of strong boxes, furnished with locks, should be provided for storing equipment at each centre.

In addition to the above equipment the following articles may be used at more than one centre :—

1 Chain and Arrows, Tape and Offset Staff.

1 Box of Samples of Grasses, such as are prepared by seedsmen:

Diagrams of the more common injurious insects, &c., such as are prepared by the Royal Agricultural Society of England.

Collections of Samples of Grasses, Clovers, Manures, and Feeding Stuffs.

Scheme No. 11.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

INSTRUCTION IN POULTRY KEEPING.

1911-12.

1. The Department are prepared to approve the appointment of at least one instructor in Poultry-Keeping for each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he or she is a native or in which he or she resides permanently.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. Unless in exceptional circumstances the remuneration of the Instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1912, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of a female Instructor will terminate as a matter of course on her marriage.

4. It will be the duty of the Instructor to give his or her whole time towards promoting improvement in poultry-keeping in the county, and in pursuance thereof to deliver courses of lectures on poultry-keeping; to conduct classes and give practical instruction and demonstrations on the feeding, housing, and general management of poultry; on the preparation of poultry for market, and on the treatment of common diseases such as gapes, etc.; to visit poultry runs, and give such practical advice as may be desired by poultry-keepers; to inquire into and report upon outbreaks of disease; to inspect the egg distribution and turkey stations referred to in Clauses 10, 13, and 14; to assist selected applicants to procure suitable stock birds; and to report to the Department and to the County Committee regarding the progress of his or her work either weekly or otherwise as may be required.

5. For courses of lectures the county should be divided into circuits, each comprising not less than five centres. The Instructor, except in special cases, should work for at least four weeks in each circuit, and deliver one lecture per week at each centre during that time. The Instructor should visit, either on the day of the lecture or on the following day, any of the poultry runs in the neighbourhood, and give such information on poultry-keeping as the circumstances of the case may suggest.

6. It will be the duty of the County Committee to select centres at which

the lectures and classes will be held, and to appoint a local committee, with an honorary secretary, at each centre, who should select and arrange for the hiring, lighting, and warming of the room in which the lectures will be delivered. In selecting centres the County Committee should have particular regard to districts in which lectures or classes may not have been held in previous years.

The County Committee alone are responsible for the selection of centres and the arrangement of lectures and classes. It is desirable, however, that the Instructor should be consulted in the matter.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody of all equipment provided.

7. Instead of delivering lectures the Instructor may conduct practical classes, in accordance with the provisions of Scheme No. 12. In no case should lectures be given after the end of the hatching season.

8. Lectures and classes should be arranged, wherever possible, to be given in schoolrooms or other suitable rooms, and should be held in rural centres only. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those meetings which are held in the rural parts of a county, especially in districts where the greatest number of those interested in poultry-keeping is to be found. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, and should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout the circuit. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of instruction. Each lecture should be followed by a discussion, during which persons interested in poultry-keeping will be invited to ask questions relative to the subject. Where a course of lectures has already been given a new syllabus should be presented.

9. The Instructor will be required, after the stations have been reported by her to be fully stocked, to make, before the 31st May, at least two inspections of all hen and duck stations, and two inspections of all goose and turkey stations in the county. In the case of turkey stations these inspections must be made between 1st February and 15th April. The Instructor shall submit at the end of each week to the County Committee and to the Department on the prescribed form a report on all stations inspected during that week.

DISTRIBUTION OF SITTINGS OF EGGS OF PURE BREEDS.

Hen and Duck Stations.

10. In counties where instruction in poultry-keeping has been provided, the Department are prepared to sanction a limited number of premiums of £5 each being awarded to approved applicants, selected by the County Committee, who distribute during the season at least 80 sittings of eggs (twelve eggs to count as a sitting); those who distribute less will be paid in proportion to the number distributed. No maximum number of sittings to be distributed is prescribed, but owners of stations must continue selling eggs at the fixed price until 31st May. Owners may set eggs for their own use, but such sittings will not count towards premiums. Applicants must agree to comply with the following conditions:—

(1.) To keep only one pure breed of hens, or one pure breed of hens and one pure breed of ducks, for station purposes.

(2.) To sell or destroy any existing fowl on the premises of which the Instructor or the Department may disapprove, and not to bring

on the premises, during the period for the distribution of eggs, fowl of any description without the sanction of the Instructor and of the Department.

(3.) To dispose of the male birds in use at the station during 1910-11, and to replace these with others unrelated to the stock at the station.

(4.) When a premium is claimed for hens alone, to keep not less than thirty or more than sixty birds, approved by the Instructor and the Department, of the selected breed. If the premium is claimed in respect of hens and ducks, not less than five ducks and twenty-five hens must be kept, or ten ducks and twenty hens, but the total number of birds to be kept at any one station shall not exceed sixty. At least one cock or cockerel must be kept for every ten hens or pullets, and one drake for every five or six ducks.

(5.) To replace each year at least one-third of the hens with early-hatched pullets, and one-third of the ducks with ducklings.

(6.) To provide proper housing and day shelter where such do not already exist. The size of run for any flocks of hens will require to be at least twenty square yards per bird.

(7.) To feed and care the birds in such a manner as the Instructor and the Department may require, and not to dispose of the birds until after the 31st May.

(8.) To supply, during the season specified in par. (10.) below, sittings of eggs from the station birds to any person in the county at a price not exceeding 1s. per dozen (the purchaser to bear the cost of package and carriage), and to replace infertile eggs that are returned within one month from the date on which they were sent out.

In special cases the Department may sanction a higher price than the above, provided the County Committee show sufficient reasons for so doing.

(9.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(10.) To enter in a special book provided by the County Committee a daily record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for, and in any case must be returned to the Secretary of the County Committee at the end of the distributing season, which will commence on the 1st December, 1911, and terminate on the 31st May, 1912. (See Clause 18.)

(11.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—In exceptional circumstances the Department may allow other pure breeds to be kept on the same premises provided all such birds are up to station standard, and all station requirements are complied with as to housing, penning, feeding, and mating. A limited number of cross-bred hens may also be allowed, provided no male birds are allowed to run with such cross-bred hens. Permission, however, will be given only where the Instructor and the Department are satisfied as to the efficiency of the arrangements made by the station holder to keep all such stock thoroughly isolated from the station birds. In no case will a first cross or other cross-bred breeding flock be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.

11. The following breeds of hens and ducks will alone be recognised :—

HENS.

Laying Breeds.

Black Minorcas. White Leghorns. Brown Leghorns.

General Purpose Breeds.

Plymouth Rocks (Barred variety recommended). Orpingtons (Buff and White recommended). White Wyandottes. Salmon Faverolles. Sussex. Rhode Island Reds.

DUCKS.

Indian Runner. Aylesbury. Pekin. Rouen.

12. A grant of 50 per cent. of the actual cost, but in no case exceeding £2, may be made to selected persons who provide themselves for the purpose of this scheme with portable wooden fowl-houses, and a similar grant not exceeding £1 may be made for suitable day shelters, approved by the Department. No grant in respect of a poultry house will be made to any station holder who has received a grant for this purpose in a previous year, nor will any grant be made in respect of improvements in an existing house, and if a new house is provided it must be portable.

GOOSE STATIONS.

13. A limited number of premiums of £2 each may be offered to persons selected by the County Committee, and approved by the Department, who will undertake to comply with the following conditions:—

(1.) To keep on the premises only one pen of birds, viz.—a gander and three geese of the Embden breed, which have been approved by the Instructor and the Department.

(2.) To retain no gander for more than six years at any one station. A gander which has been for six years at one station must be replaced by a bird unrelated to the stock at the station.

(3.) To sell *not less than 12 sittings of eggs* to residents in the county; those who distribute less will be paid in proportion to the number distributed. No maximum number of sittings to be distributed is prescribed, but owners of stations must continue selling eggs at the fixed price until 31st May, 1912.

(4.) To sell the eggs at 1s. 6d. per sitting—three eggs to count as a sitting—(purchaser to defray the cost of package and carriage where necessary). Each applicant to be restricted to one sitting.

(5.) To provide proper housing where such does not already exist. The birds to have access to suitable shelter at all times, and to be hand-fed, when a sufficient amount of natural food is not obtainable, in such a way as the Instructor and the Department may require.

(6.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(7.) To enter in a special book provided by the County Committee a daily record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for, and in any case must be returned to the Secretary of the County Committee at the end of the distributing season, which will commence on 1st January and terminate on 31st May, 1912.

(8.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—Only those applicants on whose premises there is an adequate supply of water will be approved as keepers of goose stations. In special cases the Department may sanction the keeping of a second pen of geese provided the birds are up to premium standard, are effectively isolated from the station birds, and that all station requirements with regard to mating, housing, feeding, and management are complied with.

Only one premium, however, will be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.

TURKEY STATIONS.

14. A limited number of premiums of £2 each may be offered to persons selected by the County Committee and approved by the Department who will undertake to comply with the following conditions:—

(1.) To keep one pure bred American Bronze stock turkey cock, approved by the Instructor and the Department, for the service of

turkey hens, the property of residents in the county. The approved turkey cock shall serve, at a fee of 6d. per service, twenty hens other than those belonging to the owner of the turkey cock. If a smaller number is served, the premium will be proportionately reduced. After twenty hens have been served the owner may refuse to allow the bird to serve more or may charge a higher fee. The stock birds must not be less than the following weights on 1st January, 1912, viz.:—Cockerels, 22 lbs.; adult birds 28 lbs. Birds more than three years old are not eligible for premiums.

[A station-holder under the 1910-11 scheme will not be eligible to hold a premium under the 1911-12 scheme unless the bird kept in 1910-11 is exchanged or a new bird purchased. A premium may be granted for a turkey cock selected in 1910-11 provided the bird is suitable in every respect, and is located at a different station either in the same or in another county.]

(2.) To provide such housing accommodation and to feed and care the bird in such a manner as the Instructor and the Department may require.

(3.) To enter daily in a special book, provided by the County Committee, a record of all hens served during the season. This book must be sent to the Secretary of the County Committee or to the Department when required, and in any case must be returned to the Secretary of the County Committee at the end of the service season, which will terminate on 31st May, 1912.

(4.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—In exceptional cases the Department may approve of a second turkey cock being kept, provided it is up to premium standard, and that all other station requirements are complied with. Only one premium however will be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.

GENERAL.

15. An applicant will be eligible for one premium only in respect of each of the following:—(a) hens or hens and ducks, (b) geese, and (c) turkeys but the same person may hold premiums for (a), (b) and (c). No premium, however, will be given for ducks alone.

16. (1.) As soon as the Instructor has been appointed and the number of premiums proposed to be awarded has been approved by the Department, the County Committee shall invite applications from persons in the county who already possess, or are willing to purchase, pens of the approved pure breed of hens, hens and ducks, or geese, as the case may be, or to keep one pure-bred turkey cock, and who are prepared to comply with the above conditions. When these applications have been received the Instructor shall without delay, inspect and report to the County Committee as to the number of suitable applicants. The names of the applicants selected by the County Committee, with full particulars as to the breeds, number of birds, and housing shall then be submitted, on the prescribed form, for the approval of the Department, who may thereupon further inspect the selected farms, and submit a list of those of which they approve to the County Committee for their final selection.

(2.) The County Committee may make such regulations as they think fit with regard to requiring applicants for premiums to deposit with each application a sum not exceeding 10s.—such deposit to be refunded if the applicant is not selected by the Committee, or being selected complies with all the conditions of the county scheme, or to be forfeited to the County Committee in the event of the applicant when selected failing to comply with all the conditions of the county scheme.

17. The Department will not consider applications from a county in respect of premiums under this scheme later than 1st November, 1911.

County Committees who intend to adopt this scheme should have all arrangements completed prior to the 1st December, 1911.

18. (1.) Not later than 7th June, 1912, the selected applicants for premiums must forward to the Secretary of the County Committee the record books referred to in Clauses 10 (10), 13 (7), and 14 (3), accompanied by a certificate that the entries in these books are correct, and that all the conditions of this scheme have been complied with.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary of the County Committee will be notified that payment may be made by the Committee of the premiums or portions thereof payable under this scheme.

(3.) Any premium not applied for by the 7th June, 1912, shall be considered as having lapsed.

19. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation, until the sanction of the Department has been obtained in writing.

20. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 12.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

TUTORIAL AND PRACTICAL CLASSES IN POULTRY-KEEPING.

1911-12.

1. The Department are prepared to approve the holding of Tutorial and Practical Classes in Poultry-Keeping by the Itinerant Instructors in Poultry-Keeping in counties where circumstances justify the introduction of this form of instruction.

2. Classes shall be held at each selected centre for at least two but not more than four weeks, and daily instruction of not less than two hours' duration shall be given.

At least eight pupils must be enrolled at each centre, but not more than eighteen pupils will be admitted to any class.

Pupils must undertake to attend regularly, and no person under fifteen years of age shall be enrolled on the class register.

3. It will be the duty of the Instructor—

(a.) To give instruction in the subjects suggested in the syllabus, but the Instructor should consider the requirements of the district as well as the season of the year and select subjects accordingly. Each day's work should commence with a discourse and demonstration, which should be followed by practical instruction. Diagrams, models, samples of foods, and black-board illustrations should be used as far as possible.

The pupils should be required to take as full notes as possible; these should be carefully checked and corrected by the Instructor *in her spare time*.

At the end of each week the Instructor should question the class on the week's work, and should hold a short examination at the end of the course.

(b.) To visit poultry runs every day in her spare time, especially at the homes of pupils, and advise according to individual requirements. The general conditions of management should be gone into, mistakes pointed out, and improvements suggested. The fowl-houses should be examined, and, where necessary, attention drawn to such points as day shelter, roosting accommodation, ventilation, lighting, lime-washing, etc. The preparation and mixing of the food might also be carried out under the direction of the Instructor.

(c.) To arrange for the distribution of the Department's leaflets applicable to the subjects dealt with at the classes.

(d.) To keep a register of attendance of the pupils according to Department's regulations.

(e.) To furnish weekly to the Department and to the County Committee a report on the prescribed form.

4. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee, with an honorary secretary, who will be responsible for the local arrangements necessary and for a good and regular attendance of pupils.

The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed in the neighbourhood of the centre.

The centres should be selected in rural districts; and large towns and villages should be avoided.

It will be the duty of the Secretary of the County Committee to keep an inventory, and be responsible for the custody of all equipment provided.

SYLLABUS.

(a.) SUGGESTED SUBJECTS FOR DISCOURSE AND DEMONSTRATION.

I. *Breeds best suited to district.*—(1.) for egg production; (2.) for table; value of first crosses for both purposes. Describe points of (1) a good layer, (2) a good table fowl; and illustrate the difference between each.

II. *Ducks, Geese, and Turkeys*, their rearing and general management.

III. *Breeding and selection of stock.*—Enumerate advantages of pure breeds over mongrel fowls, and point out the value of selection for desired points, e.g., laying strains, etc. Use of trap nests. Conditions necessary to obtain fertile eggs. (Illustrate by diagrams and black-board.)

IV. *Houses and Runs.*—Suitable houses and day shelters, illustrated by models or black-board sketches. Principles of housing, such as situation, shelter, materials to use, size of house, ventilation, light, flooring, fittings (nest boxes and perches); care of houses; importance of cleanliness; danger from parasites; the use of portable houses and the colony system; other systems.

V. *Chicken Rearing.*—Conditions necessary for success. Methods of hatching and rearing, natural and artificial; when to hatch for (1) stock birds; (2) egg production; (3) table birds. Describe simple hatching box and how it might be made. Provide a hatching box and hen; demonstrate on making the nest and setting the hen. Mention precautions necessary against rats and insect vermin. Explain the importance of fresh ground for chickens.

Describe best kind of coop and how to use it. (Illustrate by model or black-board.)

VI. *Feeding.* Importance of suitable food. Best foods; how to use them for (1) rearing young stock; (2) egg production; (3) table poultry; and (4) breeding stock. Give approximate quantities and prices of foods; show samples of feeding stuffs, grits, etc. Special attention should be paid to suitable foods of a simple character within the reach of poultry-keepers in the district.

VII. *Winter Egg Production.*—Explain chief points of (1) early hatching; (2) early moulting; (3) day shelters; and (4) suitable feeding with special reference to the use of animal and green foods.

VIII. *Selecting and Testing Hatching Eggs.*—Kind of eggs to select; demonstrate with suitable and unsuitable eggs. Describe a fertile, infertile, and addled egg (black-board illustrations and specimens). Explain the use of testing, demonstrating with a hand tester.

IX. *Marketing of Eggs.*—Necessary conditions, with special reference to maintenance of egg supply in winter; size, cleanliness and freshness.

X. *Egg Preservation for Home Use.*—Best preservatives and how to use them. Demonstrate with butter, vaseline, or water-glass.

XI. *Preparation and Marketing of Table Poultry.*—Trough feeding; use

of pellets ; proper methods of fasting, killing, plucking, stubbing, singeing, shaping, cooling, trussing, grading, and packing.

XII. *Simple Accounts and Egg Records*.—Explain advantages and teach suitable methods, see page [83].

XIII. *Diseases*.—Explain symptoms, cause and treatment of common diseases, making special mention of the importance of fresh ground, isolation, disinfection and other methods of prevention.

XIV. *Composition of an Egg*.—Description of its composition ; the use and association of the various parts in the formation of the chicken.

Suggested Additional Demonstrations.

(1.) Dissection of two birds, showing and explaining the effect and appearance between the organs of a healthy and diseased specimen. (2.) Dissection of a chicken with gapes ; explaining symptoms, cause, preventive and curative treatment, and demonstrating the effect of fumigation. (3.) Dissection of an over-fat hen, showing and explaining effect of accumulated fat on the egg producing and other organs. (4.) Careful removal of the digestive organs of a fowl, explaining in detail their uses. (5.) Packing eggs for hatching and private trade. (6.) Preparing soft foods. (7.) Simple operations ; the use of simple medicines. (8.) Making of simple appliances such as feeding troughs, drinking vessels, nest boxes, chicken coops, hatching boxes, etc. (9.) Use of incubator and brooder.

(b.) PRACTICAL WORK IN WHICH PUPILS SHOULD TAKE PART.

- (1.) Packing eggs for hatching and private trade.
- (2.) Making simple appliances.
- (3.) Making a hatching nest and setting the hen.
- (4.) Testing eggs.
- (5.) Treatment of chickens affected with gapes.
- (6.) Fattening ; trough feeding ; the use of pellets.
- (7.) Killing, plucking, stubbing, singeing, shaping, trussing, and packing of table poultry.
- (8.) Use of incubator and brooder.

EXAMPLE OF A SUITABLE TIME TABLE FOR A TWO WEEKS' COURSE.

FIRST WEEK.

MONDAY.—(Opening Day.)

Previous to hour of class the Instructor should visit the appointed place to unpack outfit and make final arrangements.

Discourse and Demonstration.

Feeding (†No. VI.).—Show samples of feeding stuffs and demonstrate on the preparation of soft foods.

TUESDAY.—*Discourse.*

Houses and runs (†No. IV.).

Demonstration and Practical Work.

Killing, plucking and shaping of chickens.

WEDNESDAY.—*Discourse.*

Breeds best suited to district (†No. I.).

Demonstration and Practical Work.

Trussing and packing of chickens.

THURSDAY.—*Discourse*

Breeding and Selection of Stock (†No. III.).

Demonstration and Practical Work.

Packing eggs for hatching and private trade.

† These numbers refer to syllabus.

FRIDAY.—Discourse.

Chicken rearing (†No. V.).

Demonstration and Practical Work.

(a) Making hatching nest and setting hen, or (b) use of incubator and brooder.

Class Work.

Questions to class on week's work, explaining correction of notes.

SATURDAY.—Visiting poultry yards of pupils and others in the district, and giving practical advice according to requirements.

SECOND WEEK.

MONDAY.—Discourse.

Winter egg production (†No. VII.).

Demonstration.

Dissection of an over-fat hen, showing and explaining effect of accumulated fat on the egg producing and other organs.

Practical Work

Killing, plucking and shaping of chickens.

TUESDAY.—Discourse and Demonstration.

(a) Selecting and testing hatching eggs (†No. VIII.), showing and explaining use of hand tester.

(b) Simple accounts of egg records (†No. XII.).

Practical Work.

Trussing and packing of chickens.

WEDNESDAY.—Discourse.

Diseases (†No. XIII.).

Demonstration.

Dissection of two birds, showing the difference in appearance between the organs of a healthy and of a diseased specimen, and explaining the effect of the disease.

Practical Work

Packing eggs for hatching and private trade.

THURSDAY.—Discourse.

Ducks, geese and turkeys (†No. II.).

Demonstration and Practical Work.

Killing, plucking and trussing a duck, goose or turkey.

FRIDAY.—Discourse.

(a) Marketing of eggs (†No. IX.).

(b) Preparation and marketing of table poultry (†No. XI.).

Class Work.

Résumé of work of course: examination.

SATURDAY.—Packing outfit and moving to new centre.

BOOKS.

Specimen account books are supplied to the Instructor, and each pupil should be recommended to procure one from Messrs. Dollard & Co., Printing house, Dublin. Price 6d., postage extra.

Specimen books of Egg Record forms for the keeping of monthly returns are supplied to the Instructor, and additional copies will be forwarded to pupils who are willing to undertake the keeping of records.

† These numbers refer to syllabus.

TUTORIAL AND PRACTICAL CLASSES.

List of Articles recommended for Outfit, with approximate cost.

		s.	d.	£	s.	d.
2	Folding Tables,	@	9 9	0	19	6
8	Trussing Boards,	@	0 10	0	6	8
8	Trussing Needles (8" or 10"),	@	0 2	0	1	4
8	Trussing Knives,	@	1 0	0	8	0
1	Hone for Sharpening,			0	0	6
8	Stubbing Knives,	@	0 7	0	4	8
2	Choppers,	@	0 8	0	1	4
16	Swab Cloths,	@	0 3	0	4	0
1	Fattening Pen (Indoor),			0	5	3
1	Blackboard (36" x 30"),			0	5	0
	Strong, Painted, (36" x 24" size, 4s. 6d.).					
12	Farm Produce Boxes (No. 1),	@	0 1	0	1	0
4	Farm Produce Boxes (No. 3),	@	0 3	0	1	0
1	Folding coop for treatment of sick birds,			0	2	8
2	Zinc Buckets,	@	1 9	0	3	6
1	Large Scrubbing Brush,			0	1	0
1	Small Scrubbing Brush,			0	0	6
6	Tin Pourers (2-pint size),	@	0 2½	0	1	3
6	Plucking Baskets,	@	2 0	0	12	0
8	Enamel Plates,	@	0 5	0	3	4
1	Spring Hook Weighing Machine (40 lbs.),			0	4	9
	(56 lb. size, 7s.).					
1	Bel lows for fumigating chickens affected					
	with gapes,			0	2	6
1	Egg Tester, fitted with black diaphragms for three sizes of eggs			0	1	3
1	Patent Egg Tester,			0	3	6
1	Toe Punch for marking chickens,			0	2	6
1	Set of Poultry Rings,			0	1	6
1	Sitting Nest (Indoor),			0	1	9
1	Incubator,			3	5	8
1	Foster Mother,			2	10	0
1	Dissecting case, containing 2 metal-handle scalpels, 1 scissors,					
	1 forceps,			0	7	9
	Sundries, viz. :—					
	Samples of foods and grits, insect powders, fumigating powder ;					
	small supply of drugs, viz. :—Carbolic Acid, Friar's Balsam, Per-					
	manganate of Potash, Powdered Sulphur, Epsom Salts, Chloro-					
	dyne, Glycerine,			1	5	0
	Total			£12	8	4

Arrangements have been made for the supply of the following illustrations, which will be issued direct on application to the Department :—

- 1 Set of Poultry Illustrations.
- 1 Set of Anatomy Illustrations.

Scheme No. 13.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

INSTRUCTION IN BUTTER-MAKING.

1911-12.

1. The Department are prepared to approve the appointment of at least one Instructor in Butter-making in each county in Ireland, provided the

County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which she is a native or in which she permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare as decided by the County Committee, car-hire when necessary, or a bicycle allowance not exceeding 2d. per mile.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1912, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of an Instructor will terminate as a matter of course on her marriage.

4. The instruction shall take the form of daily lessons on dairying, and practical work in which the pupils shall take part. Each course shall extend for a period of not less than two, and not more than four weeks. Not more than twelve pupils should be admitted to each class. Pupils must undertake to attend regularly.

It is desirable that pupils should be at least 15 years of age.

5. On the first day of visiting each centre the Instructor should give a public lecture and demonstration, and during the remainder of the course at that centre should conduct a class daily in which pupils only will take part, but which shall be open to the public.

The Instructor shall keep a register of attendance of the pupils, recording therein such particulars as may be required by the Department.

It will also be the duty of the Instructor to give her whole time to the work of the Committee; to visit home dairies in the county and to give necessary advice particularly with regard to the proper ripening of milk and cream; to give, where possible during that part of the day not required for class work, demonstrations in the making of butter, by means of the equipment actually in use in the dairies visited; to reply to letters from persons seeking information on dairying; and to report to the Department and to the County Committee on the progress of her work either weekly or otherwise as may be required.

6. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee, with an honorary secretary, who will be responsible for the local arrangements necessary for the proper carrying out of the work, and who will be required to comply with the annexed conditions. The local committee should undertake to have posters and hand-bills, which will be supplied by the Secretary of the County Committee, effectively displayed in the neighbourhood of the centre. Copies of these posters and hand-bills should be forwarded to the Department at least a week prior to the commencement of each class.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

To avoid expense and to ensure success these classes should be held, as far as possible, in schoolrooms or other suitable buildings in rural centres. Unless in exceptional circumstances no class should be held in a large village or town, or near a creamery.

The County Committee are alone responsible for the selection of centres and arrangement of lectures. It is desirable, however, that the Instructor should be consulted in the matter.

The County Committee shall keep a separate account of all expenditure under the scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

LOANS FOR THE PURCHASE OF HAND SEPARATORS.

Particulars of the conditions on which these loans are made to farmer occupying holdings valued at £50 and under may be obtained on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin.

Letters of application so addressed need not be stamped.

Scheme No. 14.

Special attention is directed to Clause 9.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.INSTRUCTION IN HORTICULTURE AND THE MANAGEMENT
OF BEES.

1911-12.

1. The Department are prepared to approve the appointment of at least one Instructor in Horticulture and Bee-keeping for each County in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he is a native, or in which he permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not, unless in exceptional circumstances, exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1912, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

4. It will be the duty of the Instructor to give his whole time to the work and to do all in his power to further the interests of horticulture and bee-keeping in the county; to give demonstrations and, if approved, to deliver lectures on horticultural subjects, such as soils, manures, vegetable, fruit, and flower cultivation, plant diseases, and insect pests—to visit gardens and orchards, and give practical demonstrations on spraying, planting, pruning and grafting of fruit trees—to conduct such experiments and other demonstrations as may be approved by the Department—to select suitable lands for this purpose—to supervise the sowing of the seeds and manures, and the keeping of the plots free from weeds—to give instructions in the principles and practice of modern bee-keeping—to deal with diseases of bees, plants, and trees—to advise farmers, cottagers, and others interested in land, as to the planting of trees, &c., for shelter and ornament—to reply to letters from those seeking his advice on horticultural and bee-keeping subjects—to give practical out-door demonstrations to students attending winter agricultural classes—to report to the Department and to the County Committee on the progress of his work either weekly or otherwise, as may be required.

He will be required to carry out such duties as may be assigned to him in connection with any Orders issued by the Department under the Destructive Insects and Pests Acts, 1877 and 1907. Further, it will be his duty to report to the County Committee the names and addresses of persons in the possession of bushes or trees on which he has detected or has reasonable grounds for suspecting the existence of any disease or pest referred to in such orders.

5. The Instructor shall report to the County Committee on all cases

of foul brood which may come under his notice, and shall act as Inspector of the County Committee for the purposes of the Bee Pest Prevention (Ireland) Regulations, 1909.

6. For the purposes of this scheme, the County Committee will find it convenient to divide the county into a number of districts and circuits in which the Instructors should, as far as possible, work in turn. The Instructor shall visit gardens, orchards and apiaries in the district, and give such information on practical subjects as the circumstances of the case, may suggest. In cases, however, where an Instructor may be employed to give instruction in bee-keeping only it will not be necessary to divide the county into circuits. In such instances demonstrations can be arranged at centres from which applications have been made through the Secretary of the County Committee for his services.

The County Committee are alone responsible for the selection of centres for demonstrations. It is desirable, however, that the Instructor should be consulted in the matter.

7. It will be the duty of the County Committee to select centres at which demonstrations shall be given.

In selecting centres the County Committee should have particular regard to districts in which lectures and demonstrations may not have been given in previous years.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish detailed statements of such expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody, of all equipment provided for the purpose of this scheme.

8. Where it is considered desirable, with the approval of the Department, to arrange for lectures, the lectures should be given in schoolrooms or other suitable rooms in the evenings, and should be held in rural centres. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those lectures which are given in the rural parts of a county. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, and should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout their district. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of lectures. Each lecture should be followed by a discussion, during which persons interested in horticulture and bee-keeping will be invited to ask questions.

9. The County Committee may purchase fruit, forest and other trees, shrubs, or plants, in bulk, and resell them at cost price, including carriage, to farmers and other residents in the county. As, however, it has come to the knowledge of the Department that trees and plants infested with disease have been imported into Ireland, it will be necessary for County Committees who intend to put this clause into operation to invite from approved nurserymen tenders for the supply of trees, etc., to be guaranteed free from disease, and before acceptance to submit the tenders to the Department on or before 1st day of January, 1912. The Department may, if they think it advisable, inspect the trees, &c., that are offered for sale, and satisfy themselves that the trees, &c., are suitable and free from disease.

10. In each circuit one demonstration plot may be provisionally selected for the purpose of growing vegetables, fruit, and flowers, and showing improved methods of cultivation, but no new plots shall be selected in a county if a sufficient number of suitable plots established in previous years are being continued.

Before sanctioning the establishment of a new plot the Department must be satisfied as to the suitability of the site, &c. (See Clause 11.)

Demonstration plots under this scheme may not be established in connection with National or other primary schools or teachers' residences.

(a) In counties in which a sufficient number of suitable plots, approved by the Department under this scheme, already exist, the Committee shall make provision for the continuance of the plots at a cost not to exceed £1 per plot. (See List A.)

It is not desirable to continue the grant to any plot for more than three years.

All requisite labour must be given gratuitously by the owner of the plot who will be entitled to the produce.

(b) In cases where it is proposed to establish new plots the Department will require compliance with the following regulations:—

(1) Plots must not exceed a quarter of an acre in extent, or be less than one-eighth of an acre (quarter acre plots are recommended).

(2) No new plot shall be established save at a convenient centre adjacent to a main road.

(3) Plots should be selected on sites which are properly fenced.

(4) The aspect of each plot and the nature of the soil must be suitable for the cultivation of vegetables and fruit. Necessary improvements, such as fencing and drainage, must be carried out, and when required farm-yard manure must be supplied, by the plot owner without expense to the Committee.

(5) The owner of the plot must sign an undertaking on the prescribed form to continue the plot for three years.

(6) The necessary labour must be given gratuitously by the persons providing the plots—the produce to be their property.

The cost of trees, &c., required for planting a new plot must not exceed £2. (See List B.)

[*Note*.—The Department recommend that allotments attached to labourers' cottages should be selected for the establishment of new demonstration plots subject to the foregoing conditions.]

(c) The County Committee shall forward to the Department on the prescribed form, not later than the 1st of January, a list of demonstration plots selected for the year, accompanied, in the case of new plots, by a detailed report from the Instructor.

11. The Department's approval in writing must be obtained before any expense is incurred in connection with the establishment of a plot.

12. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

LIST A.

RECOMMENDED FOR HORTICULTURAL DEMONSTRATION PLOTS ALREADY ESTABLISHED.

<i>Vegetables.</i>						Quantity.
Variety.						
Peas, .. .. .	..	..	..	..	..	1 qt.
Cabbage, Early, ..	..	..	..	..	..	1 oz.
Savoy,	..	..	..	..	..	$\frac{1}{2}$ oz.
Brussels Sprouts ..	..	..	..	..	..	$\frac{1}{2}$ oz.
Broccoli, .. .. .	..	..	..	..	..	$\frac{1}{2}$ oz.
Carrots .. .. .	..	..	..	..	..	1 oz.
Parsnips, .. .. .	..	..	..	..	..	1 oz.
Onions, Spring, ..	..	..	..	..	..	1 oz.
Autumn,	..	..	..	..	..	1 oz.
Leek, .. .. .	..	..	..	..	..	$\frac{1}{2}$ oz.
Lettuce, .. .. .	..	..	..	..	..	$\frac{1}{2}$ oz.

Flowers.

Variety.					Quantity.
Sweet Pea,	..	..	..	..	1 packet.
Mignonette,	..	..	..	..	1 "
Candituft,	..	..	..	..	1 "
Wallflower,	..	..	..	..	1 "
Nasturtium,	..	..	..	..	1 "

Artificial Manures.

Sulphate of Potash,	..	..	..	3 st.
Nitrate of Soda,	..	..	..	3 st.
Superphosphate, ..	..	..	..	4 st.

LIST B.

RECOMMENDED FOR NEW HORTICULTURAL DEMONSTRATION PLOTS.

Fruit and Vegetables.

Variety.					Quantity.
Apple Trees,	..	..	..	..	6
Black Currants,	..	..	..	..	6
Gooseberries,	..	..	..	..	6
Rhubarb,	..	..	..	..	3
Potatoes, Early,	..	..	..	..	4 st.
———— Late,	..	..	..	..	4 st.
Peas, ..	..	..	..	..	1 qt.
Cabbage, Early,	..	..	..	..	1 oz.
———— Savoy,	..	..	..	..	$\frac{1}{2}$ oz.
Broccoli,	..	..	..	..	1 oz.
Brussels Sprouts,	..	..	..	..	$\frac{1}{2}$ oz.
Carrots,	..	..	..	..	1 oz.
Parsnips,	..	..	..	..	1 oz.
Onion, Spring,	..	..	..	..	1 oz.
———— Autumn,	..	..	..	..	1 oz.
———— Potato,	..	..	..	..	1 st.
Leek, ..	..	..	..	..	1 oz.
Lettuce,	..	..	..	..	$\frac{1}{2}$ oz.

Flowers.

Roses, ..	..	..	..	..	6
Sweet Pea,	..	..	..	..	1 packet.
Mignonette,	..	..	..	..	1 "
Candituft,	..	..	..	..	1 "
Wallflower,	..	..	..	..	1 "
Nasturtium,	..	..	..	..	1 "

Artificial Manures, etc.

Sulphate of Potash,	..	..	..	3 st.
Nitrate of Soda,	..	..	..	3 st.
Superphosphate, ..	..	..	..	4 st.
Potato Sprouting Boxes, ..	..	..	..	6

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.SCHEME FOR ENCOURAGING IMPROVEMENT IN
THE MANAGEMENT OF CREAMERIES AND AUXILIARY
CREAMERIES.

GENERAL REGULATIONS.

1. The object of this Scheme is to encourage improvement in the manufacture and marketing of dairy produce by providing facilities for obtaining advice on technical and business methods affecting the management of creameries and auxiliary creameries.

2. For the purpose of this Scheme :—

(a.) The term "creamery" shall mean premises adapted and utilised for the manufacture of butter from cream which has been separated from milk by means of centrifugal force applied by mechanical power. Provided that the premises are not, and do not require to be, registered under the Sale of Food and Drugs Acts, 1875 to 1907, and that in the ordinary course of the business on every day on which milk or cream is treated at the premises the quantity so dealt with is sufficient to make at least 56 lbs. of butter.

(b.) The term "auxiliary creamery" shall mean any premises adapted and utilised for the separation of cream from milk by means of centrifugal force applied by mechanical power but not utilised for the manufacture of butter. Provided that the premises are not, and do not require to be, registered under the Sale of Food and Drugs Acts, 1875 to 1907, and that in the ordinary course of business on every day on which milk or cream is treated at the premises the quantity so dealt with is sufficient to make at least 28 lbs. of butter.

(c.) The term "creamery butter" shall mean butter which has not been blended nor re-worked and which has been made in a creamery from cream separated from milk by centrifugal force applied by mechanical power.

(d.) The term "year" shall mean the twelve months commencing on the 1st January and terminating on 31st December.

3. Any creamery or auxiliary creamery, from which application (on Form A 175, signed by the proprietor or by the president or chairman of the society or company owning the creamery or auxiliary creamery, as the case may be, and by the manager thereof) is duly received and accepted by the Department, will be inserted on the list of creameries and auxiliary creameries which are visited by the Department's Instructors in Dairying. Provided that a creamery at which cream or milk is received from one or more auxiliary creameries which are under the control of the proprietors of the creamery will not be entered or retained on the list in question unless all the auxiliary creameries referred to are at the same time entered or retained on the list. On the occasion of each ordinary visit all necessary advice will be afforded on matters relating to creamery management, and a report embodying the Instructor's observations on the condition and working of the creamery or auxiliary creamery visited may be entered in a special report book to be supplied by the Department, and to be carefully preserved at the creamery or auxiliary creamery, as the case may be, and produced for the inspection of the Department's officers when so required. Supplementary reports will be furnished, as may be thought fit, in special circumstances, e.g., when suggestions for machinery and sketch-plans or notes for alterations in buildings are required.

4. A creamery or auxiliary creamery from which application on Form A 175 is accepted will be visited by the Department's Instructors until

notification is given to the contrary on either side. A creamery or auxiliary creamery on the list of those receiving visits from the Instructors at the date of publication of the scheme will be considered as entered for visits under this Scheme, unless notification to the contrary is received.

5. Applications (on Form A 174, signed by the proprietor or by the president or chairman of the society or company owning the creamery or auxiliary creamery, as the case may be, or by the manager thereof) may be made for special visits of the Instructors for certain purposes, *e.g.*, the preparation of sketch-plans and notes for the construction or alteration of buildings, or suggestions for machinery.

Applications on Form A 174 will be considered only from creameries and auxiliary creameries included in the list of those visited by the Instructors in connection with applications on Form A 175.

6. The premises and equipment and the manufacturing operations and business methods of creameries and auxiliary creameries entered on the list of those visited by the Department's Instructors must be open at all reasonable times to inspection by the Department.

7. The Department may, without assigning any reason, refuse to send an Instructor to any creamery or auxiliary creamery.

8. The Department will publish from time to time a List containing the names and addresses (with such other particulars as may be thought fit) of those creameries and auxiliary creameries entered for inspection which satisfy the Department in the following matters :—

- (1.) That proper care has been taken by the proprietors and staff to secure that the milk or cream dealt with at the creamery or auxiliary creamery is supplied in a clean condition and in clean vessels.
- (2.) That proper care has been taken by the manager and staff to maintain cleanliness and order in the management and condition of the creamery or auxiliary creamery.
- (3.) That the book-keeping and business methods are efficient and that the manufacturing operations are properly carried out.
- (4.) That the buildings and equipment are in good condition and adequate for the business.
- * (5.) That suitable packages are used for butter, and in the case of 56 lb. boxes and 112 lb. keels that they conform to the standard specifications (see Leaflet No. 60). Strict adherence to the requirements of the specification in regard to the strength and capacity of the packages will be regarded as essential.
- * (6.) That, if the creamery is included in the latest published List, butter is forwarded to each of the Surprise Butter Inspections held by the Department after the date of publication.

[Failure to forward duly a package of butter from a creamery to any one Surprise Butter Inspection will, except in circumstances which in the opinion of the Department afford a satisfactory excuse for such failure, disqualify the creamery for inclusion in the next List to be published by the Department.]

* Not applicable in the case of auxiliary creameries.

SURPRISE BUTTER INSPECTIONS.

9. On a number of occasions at the option of the Department a telegram may be forwarded to any creamery on the latest published List of creameries (see clause 8), requesting the recipient to "send butter to-day to Department's Surprise Inspection." Provided that a creamery which is removed from the List of those visited by the Department's Instructors in Dairying or which fails to comply with clauses 8 (1), 8 (2), 8 (3), 8 (4), or 8 (5) of this scheme shall not be entitled to participate in the Inspections.

The butter shall be sent to an address in Dublin or elsewhere, which will be communicated to the Manager of the creamery.

10. Between the 1st October and 1st May the telegrams will be issued on Mondays, Wednesdays and Fridays only.

11. The butter at each Inspection will be judged one or more times by one or more persons appointed by the Department, and in one or more sections according as the Department may consider desirable.

12. The following scale of points will be adopted as the basis in judging the butter sent to the Inspections :—

Flavour,	60 points.
Texture	30 "
Colour,	5 "
† Packing and finish	5 "
<hr/>	
Total,	100 points.

† See Clause 8 (5).

A schedule giving in such form as the Department may decide the results of the judging of the butter received from each creamery participating in the Inspection will be issued after each Inspection to all the participating creameries. In addition notes of any particular defect or defects observed in any lot of butter may be communicated to the manufacturer for the purpose of indicating the points in which improvement is especially required. If so desired an Instructor in Dairying will be directed to visit the creamery for the purpose of assisting the Manager to remedy any defect, which can be most satisfactorily dealt with by means of such assistance.

13. The following conditions must be complied with in respect of each lot of butter forwarded to the Inspections :—

- (1.) The butter forwarded must be a sample of the ordinary creamery butter made at the creamery on the day on which the telegram is received, from cream separated on a preceding working day, and must be forwarded by passenger train, carriage paid, on the day on which the telegram is received.
- (2.) The quantity of butter forwarded must be either 56 lbs. or 112 lbs. packed in a box, keg, or kiel, similar to those in regular use at the creamery. In special circumstances the Department may, however, in the case of Inspections held between 1st October and 1st May, accept a smaller quantity of butter.
- (3.) Excepting the direction labels supplied by the Department there must be no mark or label in or on the butter which might indicate its origin.
- (4.) The carrying company's receipt must be transmitted to the Department by post on the day on which the butter is forwarded. Unless the carrying company's receipt is received at the office of the Department by the ordinary postal delivery on the morning of the day following that on which the telegram is despatched the butter will be liable to be disqualified.

Failure to comply with any one of the foregoing conditions will render butter in respect of which such failure takes place liable to be disqualified from participating in the Inspection to which it is forwarded.

14. The butter forwarded for the Inspections will be paid for by the Department at the end of the year. The prices given will be based on the current market rates prevailing for the various classes of butter at the dates on which the telegrams are despatched, and shall be determined by the judges.

Provided that any butter which reaches the Department in an unsatisfactory condition or which contains defects which, in the opinion of the Department, should be seen by the manufacturer, may be returned to him at his own risk, and will not be paid for.

15. The Department may, without assigning any reason, refuse to accept for the Inspections butter from any creamery.

16. In all cases of dispute in matters connected with any part of this Scheme the decision of the Department shall be final.

LOCAL SURPRISE BUTTER INSPECTIONS.

The Department are prepared to devote portion of their funds to encouraging Local Surprise Butter Inspections carried out by creamery proprietors and managers themselves.

Creamery proprietors and managers desirous of establishing a system of Local Surprise Butter Inspections in any district in Ireland should first ascertain the number of creameries from which butter would be regularly sent to the Local Inspections. A Local Association representative of the proprietors and managers of all the creameries which participate in the Local Inspections should then be formed, and a Secretary should be appointed. The duties of the Secretary should be to conduct all correspondence and business in connection with the Local Inspections, subject to such regulations as the Local Association may prescribe with the approval of the Department. The Department will be prepared to consider an application from a duly constituted Association of this kind for a grant towards the expenses of holding Local Surprise Butter Inspections.

The grant to be made by the Department will be subject to the following conditions :—

- (1.) That a sufficient number of creameries participate regularly in the Inspections.
- (2.) That all the regulations made by the Local Association are submitted to the Department for approval and are approved by the Department.
- (3.) That a proportion of the cost of the Inspections is contributed by the proprietors of participating creameries.
- (4.) That the Local Association accepts complete responsibility for the proper carrying out of the Inspections.
- (5.) That the Inspections are carried out strictly in accordance with the regulations as prescribed by the Local Association and approved by the Department.

CERTIFICATES.

An examination will be held annually in March in technical subjects as applied to creamery management, and a certificate of having passed the examination will be awarded to successful candidates. The subjects of the examination are set forth in Appendix III. Due notice of time and place will be given to applicants.

A special certificate designated the "creamery manager's certificate" will be granted to candidates who having passed the examination in technical knowledge satisfy the Department with regard to their practical ability as creamery managers.

Applications for admission to the examination should be made on Form A 137, to be obtained from the Department, and must be accompanied by a deposit of £1, which will be returned if the candidate presents himself for examination, or if his application is not accepted.

WINTER COURSES OF INSTRUCTION.

During the winter a course of instruction in the subjects of the examination for Certificates will be provided. This course usually occupies five months approximately, commencing in October and terminating in March. At the close of this course a limited number of the best students will be afforded facilities for learning the practice of creamery management during the summer in selected creameries. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery. Free places at the course will be offered to a limited number of *bona fide* managers of creameries or auxiliary creameries of at least three years' standing.

Short courses of instruction for creamery managers and butter makers may also be provided at suitable local centres.

Attendance at the annual course of instruction for students of agriculture

at the Albert Agricultural College, Glasnevin, is recommended as a preliminary general training for young men who may intend to become creamery managers.

SCHOLARSHIPS FOR STUDENTS OF CREAMERY MANAGEMENT.

One or more scholarships, tenable at the Royal College of Science, Dublin, may be offered yearly to students who desire to specialise in subjects relating to the management of creameries. Particulars as to the date, place, and subjects of examination will be published by the Department in due course.

TRAINING OF DAIRYMAIDS.

Girls who desire to become dairymaids in creameries, and who have attended two terms either at the Munster Institute or the Ulster Dairy School will, on attaining the required standard at their second terminal examination, be admitted to the third term course at the Munster Institute or Ulster Dairy School. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks. A pupil who has had a season's experience of the work of a dairymaid at a creamery or who has attended for one term at a School of Rural Domestic Economy before entering the Munster Institute or the Ulster Dairy School will be regarded as eligible for a course of training as pupil dairymaid after two terms at the Munster Institute or Ulster Dairy School provided she attains the required standard and is regarded as physically suitable for the work.

The Regulations of this Scheme are subject to revision from time to time.

The Appendices and List of Creameries and Auxiliaries published by the Department in connection with this Scheme are printed separately, and may be obtained free of charge, and post free, on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin. Letters of application so addressed need not be stamped.

August, 1912.

Scheme No. 16.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE ERECTION OF VILLAGE HALLS.

The Department are prepared to consider a limited number of applications for loans to aid in the erection and equipment of new buildings, or the adaptation of existing buildings, to be used as Village Halls in rural parts of Ireland, subject to the following conditions:—

1. Application must be made on the prescribed form, which can be obtained free from the Department.
2. The amount of any one loan to be advanced by the Department under this scheme shall not exceed two-thirds of the approved cost—the balance to be raised locally by means of private subscriptions or otherwise

The loan shall be issued in such sums and at such times as the Department may decide.

3. A Committee of not less than three or more than nine solvent rate-payers resident in the district shall be formed. The buildings and equipment shall be vested in this Committee who shall declare a Trust that the said buildings and equipment are held by them as Trustees for public purposes, *i.e.*, for the promotion of "the purposes of agriculture and rural industries as defined by the Agriculture and Technical Instruction (Ireland) Act, 1899," and shall make provision to the satisfaction of the Department for the appointment of new Trustees pursuant to these conditions.

4. The Trustees when applying for a loan, shall furnish the Department with a statement setting forth the special object in view in providing a Hall, together with such details as to the site, particulars of tenure, &c., as the Department may require.

5. The Trustees shall not take any steps to begin the work of building or to incur any liability until the Department have signified in writing their approval of the design, plans, and estimate of the cost of erection &c., of the proposed Hall.

6. Before the amount of the loan is issued the Department will require to be satisfied that the sum contributed locally has been actually collected and lodged in bank.

7. The sum advanced by the Department together with the money contributed locally for the purpose shall be expended by the Trustees on the building and equipment of the Hall in the manner approved by the Department.

8. The Department must be satisfied that the Trustees have made adequate provision for the permanent and proper upkeep of the buildings and equipment.

9. The sum advanced by the Department shall be duly charged as a first charge on the land and buildings. In addition, the Trustees shall enter into a Bond to repay the amount of the loan in not more than ten equal annual instalments payable on the first day of June in each year with interest at the rate of two-and-a-half per cent. per annum on the outstanding balance; provided, however, that the Trustees shall be at liberty to repay the full amount or the balance of the loan at any earlier period. The Bond and Deed of Charge referred to in this clause, and the Declaration of Trust referred to in clause 3 shall be in such form, and shall contain such provisions as the Department may prescribe.

10. The Trustees shall have the sole management of the Hall; shall pay all the rent and other charges thereon, and shall keep the building and furniture adequately insured, and in proper repair, to the satisfaction of the Department.

11. It shall be a condition of the loan that the Committee or Committees of Agriculture and Technical Instruction for the county in which the building is situated, and the Department shall have prior claim for the use of the Hall in connection with the purposes of any approved County Scheme. On all occasions when the Hall is required either by a County Committee or by the Department the Trustees shall, at their own cost, have the Hall sufficiently lighted and warmed.

Subject to the foregoing the Trustees may permit the Hall to be used for entertainments or for any other purpose of which they may approve.

12. The Trustees may fix a scale of fees for use of the Hall by a County Committee or the Department under the preceding clause, or by any other person or body for a purpose approved by the Trustees—provided that such scale so far as it refers to the use of the Hall by a County Committee or by the Department for the purposes of Agriculture and Technical Instruction, shall first be submitted to the Department for their approval in writing. All fees so received shall be applied by the Trustees in repayment of the loan, and for the purpose of defraying or assisting to defray expenditure in connection with the rent of the site of Hall and the upkeep of the buildings and equipments.

13. The Trustees shall keep accurate accounts of all receipts and expenditure in connection with the buildings and equipment, and shall permit same to be inspected at any time by the Department's Officers.

14. The Department shall have the right at all times to visit, inspect and examine the buildings and equipment.

15. If prior to the repayment of the loan the Trustees or any of them, or any Trustee appointed subsequent to the issuing of the loan dies, or is desirous of being discharged from the Trust, or goes or resides out of Ireland for a continuous period of twelve calendar months, and neglects or refuses to carry out the Trust, or becomes unable to execute the Trust, the surviving or continuing Trustees or Trustee shall, subject to the Department's approval, appoint a new Trustee or Trustees, and in case that any such surviving or continuing Trustee shall neglect or refuse to exercise power of appointment, the appointment shall be made by the Department.

16. In all matters relating to loans under this Scheme, and to the regulations of the Scheme the decision of the Department shall be in every respect final and conclusive.

Scheme No. 17.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE ERECTION OF FENCING IN COUNTIES CONTAINING CONGESTED DISTRICTS.

The Department are prepared to consider a limited number of applications for loans for the erection of wire fencing on the lands of small occupiers resident in counties containing congested districts, subject to the conditions mentioned below.

These loans are not intended for occupiers who can afford, or may reasonably be expected to pay, cash for the required fencing, nor for cases in which having regard to the position of the occupier and the extent of the proposed fencing, application for a loan should be made to the Board of Works. The object of these loans is to encourage small occupiers to fence in their arable land or to fence off mountain grazing so as to permit of arable land being properly cropped and laid down with grass and clover seeds.

1. An application for a loan must be made on the prescribed form, which can be obtained free from the Department.

2. No application for a loan will be considered unless in cases where the Department are satisfied that each applicant is a person of very small means.

3. Save in exceptional circumstances no application for a loan will be considered from any farmer whose gross Poor Law Valuation exceeds £20.

4. In no case shall a loan be granted to an individual for a smaller sum than £5 or a larger amount than £35. When the loan is made to two or more persons the loan shall not exceed £35 for each person who is a party to it.

5. Loans will be granted for the purpose of erecting wire fencing

(a) for the boundary fence of a holding ;

(b) for separating arable land from mountain grazing or similar rough pasture ; and

(c) for the internal fencing on the farms of applicants where wire fencing is the most suitable for the purpose.

6. Subject to the provisions of Clause 7, loans of £5 up to and including £15 shall be repayable within five years ; and loans exceeding £15 and not exceeding £35 shall be payable within ten years. In the case of a joint loan to two or more persons, the Department will decide whether the loan shall be repayable in five or ten years as the case may be.

7. In the case of loans to individuals, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount of the loan in ten (or twenty, as the case may be) equal half-yearly instalments on the 1st January and the 1st July in each year, together with interest at the rate of 3 per cent. per annum on the outstanding balance. In the case of joint loans to two or more persons the security shall be in the form of a joint and several bond.

For example, a loan of £10 granted on the 1st January, 1907, will be repayable as follows:—

(Instalments of £1 with interest on £10 for six months at 3 per cent.)		
£1 : 3 : 0 on 1st July, 1907	interest on £10 for six months at 3 per cent.	
£1 : 2 : 9 „ 1st January, 1908	(do.	9 do.
£1 : 2 : 4 „ 1st July, 1908	(do.	8 do.
£1 : 2 : 1 „ 1st January, 1909	(do.	7 do.
£1 : 1 : 9 „ 1st July, 1909	(do.	6 do.
£1 : 1 : 6 „ 1st January, 1910	(do.	5 do.
£1 : 1 : 2 „ 1st July, 1910	(do.	4 do.
£1 : 0 : 11 „ 1st January, 1911	(do.	3 do.
£1 : 0 : 7 „ 1st July, 1911	(do.	2 do.
£1 : 0 : 4 „ 1st January, 1912	(do.	1 do.

8. The person to whom a loan is granted shall be at liberty to repay the full amount or the balance of the loan, with interest, at any earlier period than that provided for in the form of guarantee.

9. When satisfied that the approved applicant for the loan has made proper preparation for proceeding with the work, the Department will supply the necessary fencing materials as well as the services of a foreman to superintend, for a limited period, the erection of the fencing. The farmer on whose lands the fencing is to be erected must at his own expense provide such other labour as may be required.

10. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

11. The decision of the Department in all matters relating to these loans shall be final and conclusive.

Scheme No. 18.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE PURCHASE OF AGRICULTURAL IMPLEMENTS, &c.

The Department are prepared to grant a limited number of loans for the purchase of farm implements and machinery, including Horse Sprayers, Thistle Cutters, Potato Diggers, Mowers and Binders, small Threshing Machines, Hand Separators, and other implements and machines, which may be approved on application.

Preference will be given to applications recommended by County Committees of Agriculture, and the Department will rely upon the Committees to recommend only those applicants who are deserving of such assistance and who may be safely depended upon to repay the loans granted.

It is suggested that a person intending to apply for a loan should, subject to clause 3, consult the County Agricultural Instructor as to the pattern of the machine which he contemplates purchasing.

1. Application must be made on the prescribed form, which may be obtained free from the Department, or from the Secretary of the County Committee.

2. The Department will need to be satisfied that the applicant is a person

of small means, and one who could not reasonably be expected to pay cash for the required machine.

3. No loan will be made save for the purchase of a machine of a price and pattern approved by the Department.

4. Before the loan is granted the applicant shall—

- (a) Lodge with the Department one-fourth of the purchase price, together with the necessary stamp duty, etc., and
- (b) With two or more solvent sureties, to be approved by the Department, enter into a Bond or such other form of guarantee as the Department may require, to secure repayment of the Department of the amount advanced by them, viz., three-fourths of the approved purchase price, in equal annual instalments, payable on 1st November in each year, together with interest at the rate of three per cent. per annum on the outstanding loan. The number of annual instalments shall be as follows:—

For a loan not exceeding Fifty Pounds,	..	Three.
For a loan exceeding Fifty Pounds,	..	Five.

5. The machine will be ordered by the Department, who will pay the vendor the agreed on price as soon as the applicant has notified the Department that he has taken delivery of the machine. Any applicant ordering the machine direct from the vendor without the permission of the Department will not be granted a loan.

6. The applicant shall, during the period from the delivery of the machine until the payment of the last instalment of the purchase money to the Department, maintain the machine in good order and repair, and shall pay and defray all cost of repairs and of providing new parts for, and expenses in relation to, the said machine, and further shall not during the above period sell or otherwise dispose of the machine without having previously obtained the consent in writing of the Department.

7. Except in the case of Hand Separators, the applicant shall agree to hire the machine to farmers in his district, on such conditions (if any) as may be prescribed by the County Committee with the approval of the Department.

8. The Department reserve the right to inspect the machine at any time and to require the applicant to insure the machine against damage by fire until the loan has been fully paid off.

9. The Department also reserve the right to refuse any application for a loan without assigning any reason for such refusal.

10. The decision of the Department in all matters relating to these loans shall be final.

UNDER REVISION.

Scheme No. 20.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE DAIRY CATTLE OF IRELAND THROUGH THE SELECTION AND REGISTRATION OF COWS.

Dairying, as well as the raising of store cattle, is one of the principal branches of agriculture pursued in this country. It is, accordingly, of importance that the milking properties of Irish cattle should be preserved and improved. In dairy herds the yield and quality of milk given by each cow largely determine whether the animal realises a profit or entails a loss to the owner; consequently it is essential that farmers should know exactly the quantity and quality of milk which each cow yields per annum. At the same time, as young cattle are a considerable source of revenue, it is desirable that the good milking cow should be of the type likely to produce a calf which will be of value for both beef and milk.

With the object of encouraging the improvement of Irish dairy cattle, the Department have decided to put into operation the following scheme.

Every owner of dairy cows is strongly advised to join a cow-testing association in his district, or, if there is no such association, to help as far as practicable to form an association in his locality. Much greater results can be attained by an association than by the isolated efforts of individuals. These associations enable their members not only to ascertain the quantity but also the quality of the milk yielded by each of their cows, and they provide a means whereby a cow owner can tell which of his cows are worth submitting for inspection with a view to their registration.

After the year 1912, applications for the inspection of cross-bred cows for the purposes of this Scheme will not be accepted, save in very exceptional circumstances, unless made through a cow-testing association complying with the regulations in Clause 8.

The Department are prepared to encourage the formation of cow-testing associations in the manner indicated in Clauses 8 and 9.

1. The Department will keep a Register of dairy cattle^a (hereinafter referred to as the Register) in which cows and their progeny may be entered, subject to the provisions of this scheme. The inspection of cows with a view to entry on the Register will be carried out by the Department.

INDIVIDUAL OWNERS.

2. Owners of good cross-bred shorthorn, and pure-bred dairy cows may apply on the prescribed form for the inspection of their stock by the Department as regards :—

- (a) General appearance,
- (b) Milk yield.

Only good cows of a distinct and well-defined type are eligible.

3. Applications on Form A 63 for the inspection of cows which have not been tested by a cow-testing association should be lodged with the Department between 1st July and 31st August, 1912, and must be accompanied by a fee of 2s. 6d. in respect of each cow entered for inspection. [Applications for the inspection of cows tested by a cow-testing association should be made on form A 416 in accordance with the provisions of Clause 8 (IV.).]

Cow owners presenting animals for inspection will be refunded all fees paid by them, except in respect of cows which are provisionally selected for registration under Clause 4.

4. Cows entered under Clause 2 will be provisionally selected, on the ground of general appearance, at local shows, local exhibitions, or at such other convenient centres as may be determined by the Department as soon as practicable after 31st August. The Department will give due notice to each cow owner of the centre fixed for the inspection of his animals.

With regard to inspections elsewhere than at local shows, it is to be understood that the Department, save in exceptional cases, cannot undertake to send an Inspector to any district unless at least ten cows from such district are offered for inspection.

All animals provisionally selected for general appearance under this scheme will be suitably marked by the Department for future identification.

Provisionally Selected Cows.

5. Owners of cows provisionally selected under Clause 4 are required to observe the following conditions :—

- (a) To provide themselves with an approved type of machine for weighing milk ;
- (b) To weigh the milk yielded by each cow on every seventh day during the milking period (the exact day of the week for each herd will be fixed by the Department), and to record the same on Form A 64, which will be provided by the Department for the purpose ;

- (c) To permit their herds to be inspected by the Department at any time; and
- (d) To afford the Department every facility for examining the milk records and the weighing of the milk, and for taking samples of the milk of each selected animal.

6. Form A 64, containing the records kept under Clause 5 (b) shall be forwarded by the owner of the cow to the Department as soon as the milk yield for a milking period (as defined in Clause 14) has been recorded, or at such other time or times as the Department may require.

Owners should forward those Forms at the proper time, without waiting for an application for them from the Department. The Forms should be enclosed in envelopes that will be provided for the purpose by the Department. Postage need not be prepaid on Forms so enclosed.

7. As soon as possible after the receipt of Form A 64, the Department will notify to the owner their decision as to the registration or rejection of the animal whose milk yield is recorded on the Form.

COW-TESTING ASSOCIATIONS.

8. The following regulations apply to Cow-Testing Associations only :—

(I.) A cow-testing association formed for the purpose of this scheme will be required to undertake to comply with the following conditions :—

- (a) Any dairy farmer in the district served by the Association may become a member.
- (b) The association shall secure an entry of as many herds of milking cows as possible, each member of the association being required to enter all his cows.
- (c) The members shall have the milk of each cow weighed on every seventh day (the exact day of the week for each member being fixed by the association). The morning and evening milk shall be weighed and recorded separately on the record sheets (Form A 291) which will be provided by the Department.
- (d) After every weighing a sample of each cow's milk must be taken and preserved until the end of the month, when the composite sample for the month shall be tested for butter-fat.
- (e) The association shall appoint a secretary, whose duties shall be : (i.) to ensure that the weekly records are transferred each month from Form A 291 to the monthly summary book (Form A 288) provided by the Department; (ii.) to ensure that the monthly butter-fat tests are regularly carried out; (iii.) to record in the monthly summary book (Form A 288) the results of these tests, and the calculated number of pounds of butter-fat contained in the milk; and (iv.) to check and certify the milk records and other particulars of cows submitted for inspection by members of the association for the purposes of Clause 8 (IV.).
- (f) The record sheets, monthly summary books, list of members of the association, etc., must be open to inspection by the Department at any time.

(II.) When the Department are satisfied that a cow-testing association has been formed, and that suitable arrangements have been made to comply with the foregoing requirements, they will be prepared to supply the Society with the necessary number of record sheets (Form A 291), and monthly summary books (Form A 288).

(III.) If the number of cows for which milk records are kept throughout the year exceeds fifty, the Department will (in a limited number of cases) be prepared for at least one year to make a grant to the secretary at the rate of one penny per cow per monthly test towards the cost of testing the milk for butter-fat. This grant should be supplemented by the contributions of the members.

(IV.) The Department will be prepared to inspect at such centres as may be determined by them all cows which have given, during the milking period covered by the records, a yield of not less than 210 lbs. of butter-fat, provided that the calculated average percentage of butter-fat does not fall below 3 per cent. and the calculated yield of milk below 6,000 lbs. The Department will accept for entry in the Register, on payment of a fee of 2s. 6d. for each cow, all such animals which on the results of the inspection they consider to be of good conformation and well-defined type.

Applications for the inspection of cows should be made to the Department on the prescribed form (A 416), between 1st July and 31st August, and must be accompanied by a certified record of the milk yield of each cow for a complete milking period.

9. The Department are prepared to encourage the formation of Cow-Testing Associations by arranging for the attendance of a lecturer at meetings of dairy farmers to explain the objects and advantages of these associations. Moreover, if in any district where an association does not already exist at least three owners of dairy cows, possessing collectively not less than fifty cows, agree to form themselves into an association, and appoint a secretary, the Department, on application being made by the secretary on behalf of the association, will send one of their instructors to the district to assist in the establishment of the association. Applications in regard to proposed cow-testing associations will be dealt with in the order in which they are received. It is desirable that associations, which are to come into operation in the following year should be formed as soon as possible after 1st November in each year.

REGISTERED COWS.

10. The owner of each registered cow must comply with the following conditions:—

- (a) To have the animal served by a registered dairy bull or a pure-bred bull of her own type. These bulls must be passed by the Department as eligible for a premium.

[Persons who intend eventually to enter the progeny of registered cows in the herd books of their respective breeds must have the cows served by pure-bred bulls. N.B.—A registered dairy bull may be pure-bred.]

- (b) To furnish to the Department on the prescribed form (A 66) within seven days from the date of birth, particulars regarding sex, colour, markings, etc., of each calf produced by a registered cow, and such particulars of the sire and dam as the Department may require; and
- (c) To keep on the prescribed form (A 79) a record of the breeding, date of birth, etc., of progeny, for the purposes of future registration.

11. The female progeny of registered cows served by bulls approved under Clause 10 (a) will be eligible for inspection when about two years old, at a fee of 2s. 6d. each.

12. In cases where the conditions of Clause 10 have been fully complied with, male progeny are eligible for inspection with a view to provisional selection for premiums under the Department's Cattle Breeding scheme, within the limits of age specified therein, and, if so selected, will be entered in the Register as "Registered Dairy Bulls."

Owners of male progeny eligible for inspection should apply on the prescribed form in December for a certificate of eligibility, and for particulars of the show or centre where the animal should be exhibited for inspection.

13. When a registered cow or her calf has been disposed of, the Department must be notified of the fact within fourteen days of the disposal of the animal, and at the same time advised of the name and address of the new owner.

The death of a registered cow or her calf must also be notified to the Department within fourteen days of the death of the animal.

14. For the purposes of this scheme the term "milking period" shall mean the period during which a cow continues to yield milk after calving. Provided that if such period exceeds 45 weeks, the first 45 weeks after calving shall be regarded as the cow's milking period.

15. Cow-testing associations and other persons are permitted to participate in this scheme only on the distinct understanding that it is subject to modification or withdrawal at the discretion of the Department.

16. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

July, 1912.

Scheme No. 21.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

LOANS FOR THE REPAIR AND EQUIPMENT OF MEAL MILLS, KILNS FOR DRYING, &c.

The Department are prepared to consider a limited number of applications for loans to aid in the repair and equipment of existing mills, etc., or the adaptation of existing buildings to be used as such, subject to the following conditions :—

1. The application must be made on the prescribed form, which can be obtained from the Department.
 2. The amount to be advanced by the Department under this scheme shall not exceed two-thirds of the approved cost.
 3. The applicant shall furnish the Department with a statement setting forth the special object in view in providing the mill, together with such details as to site, particulars of tenure, etc., as the Department may require.
 4. The applicant shall not take any steps to begin the work of repairing, equipping or erecting the building, or incur any liability until the Department have signified in writing their approval of the plans, estimate of cost of repair or of additional buildings, and machinery and equipment, etc.
 5. The sum advanced shall be expended in a manner approved of by the Department.
 6. The sum advanced shall be duly charged as a first charge on the building, machinery and equipment. In addition, the applicant shall, together with two solvent sureties approved by the Department, enter into a bond to repay the loan in not more than ten equal annual instalments, payable on the first day of January in each year, with interest at the rate of 3 per cent., the first instalment to be repayable, with interest calculated from the date of advance, on the second day following the date of said advance. Provided, however that the borrower shall be at liberty to pay the full amount of the balance of the loan at any earlier period, together with the interest to date.
 7. During the period the loan is outstanding, the buildings, machinery and equipment shall be kept in proper repair, and adequately insured, by the applicant at his own expense. The receipts for insurance premiums shall be submitted to the Department when required.
 8. The Department shall have the right at all reasonable times to inspect the buildings, books, machinery and equipment.
 9. The applicant shall undertake to furnish such reports and to keep such accounts in connection with the working of the mill as the Department may require, and shall submit same to the Department when requested to do so.
 10. In all matters relating to loans under this scheme, and to the regulations of the scheme, the decision of the Department shall be in every respect final and conclusive.
- In the event of an instalment of principal and interest being in arrear for

more than four weeks, the Department shall be at liberty to act in any one or more of the following ways at their discretion :—

- (a.) to recover with costs the amount of the instalment of principal and interest from the applicant and his sureties ;
- (b.) to recover with costs the outstanding balance of the loan, with interest, from the applicant and his sureties ;
- (c) to take possession of the mill buildings, machinery and equipment, and to sell same in satisfaction of so much of the loan as may not be recovered from the applicant and his sureties.

Scheme No. 22.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

VETERINARY DISPENSARIES IN CONGESTED DISTRICTS.

1. The Department will establish a limited number of Veterinary Dispensaries in the poorer parts of the nine congested counties. For this purpose they propose to subsidise a number of Veterinary Surgeons, whose headquarters are within reasonable distance of the districts to be benefited.
2. In fixing the subsidy to be paid Veterinary Surgeons for their services the Department will take into consideration the poverty of the district, the difficulties of travelling, and whether the district is or is not regularly visited by the Veterinary Surgeon in the ordinary course of his practice.
3. Subsidised Veterinary Surgeons will be required to give advice to all *bona fide* farmers under £10 valuation and resident in congested districts who seek it either at a dispensary or at the Veterinary Surgeon's headquarters.
4. The term "*bona fide* farmer" is to be understood to mean a person who derives his means of living mainly from the cultivation of his holding. Each applicant must, if requested to do so, produce evidence that his total valuation does not exceed £10.
5. Subsidised Veterinary Surgeons will be required to attend at certain centres at least fortnightly, or as may be arranged, on days and at hours fixed by the Department, and advertised by them in the district.
6. Subsidised Veterinary Surgeons must also attend when required at the residence of farmers entitled to the benefits of this scheme.
7. The following scale of fees will apply :—
 Advice at headquarters or dispensary, 1s. per case.
 Simple operations at headquarters or dispensary, 1s. per case.
 Severe operations at headquarters or dispensary, 2s. 6d. per case for persons whose valuation is £5 or under, and 5s. per case for persons whose valuation exceeds £5 but does not exceed £10.
 Innoculation at headquarters or dispensary, 1s. per case.
 Attendance at farmer's residence, 1s. per £ of valuation, provided the minimum fee is not less than 2s. 6d.
 Double fees may be charged after sunset.
8. Medicines supplied by the Veterinary Surgeon to persons entitled to the benefits of this scheme shall be charged for in addition at reasonable prices.
9. Subsidised Veterinary Surgeons will be required to keep at their headquarters and at each dispensary a record of the number and the nature of the cases treated under this scheme, the fees charged therefor, and the amount charged for any medicines supplied.
10. The Department reserve the right to ask each Veterinary Surgeon subsidised under this scheme to give public lectures on veterinary hygiene at a fee to be arranged.
11. The work of each subsidised officer under this scheme shall be subject to inspection by the Department from time to time.
12. The subsidy will be paid at the end of each quarter.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING THE BREEDING OF IRISH
DRAUGHT HORSES.

1. The objects of this scheme are to increase the number and to improve the quality of Irish Draught Horses.

The Regulations issued in 1911 described the type of animal which it was desired to encourage under this scheme as being one free from all trace of English or Scotch Cart-horse blood, standing not less than 15.2 hands high, with short clean flat legs, well set joints and good feet, good head and rein, well laid back shoulders, and displaying throughout its conformation a sufficiency of power to warrant its doing general farm and harness work, and with free and light stepping action.

2. Local exhibitions were held throughout the country in 1911, at which a number of mares were selected by the Department's judges. The mares so selected have been entered in a Register of Irish Draught Mares which is kept by the Department.

3. The Register of Stallions issued annually by the Department in accordance with the regulations of their general Horse Breeding scheme, will henceforth contain, in a separate section, a list of registered stallions of the Irish Draught type which will be available for the purposes of this scheme.

4. Fillies out of mares entered in the Mare Register and got by a registered Irish Draught stallion will, when two years old, be eligible for entry in that Register provided they are passed by the Department as sound and suitable.

A limited number of such registered fillies, selected by the Department and retained for service by an approved registered Irish Draught stallion, will be awarded, on such conditions as the Department may prescribe, a premium of £20 per annum for not more than five seasons provided a live foal resulting from such service during the preceding year is produced during each of the five seasons in question.

5. Colts out of mares entered in the Register and got by registered Irish Draught stallions will, on inspection as two-year olds, be purchased by the Department for a sum of not less than £200 each, provided they are passed by the Department as sound and suitable for registration.

6. The Department, subject to certain conditions to be prescribed by them, will defray the following expenses in respect of the service of each registered mare sent by their instructions to a registered Irish Draught stallion: (a) the approved service fee, which shall not exceed £3 3s. per mare, and (b) where the stallion is located not less than fifteen miles from the mare the cost of carriage of the mare by rail once each way.

7. The provisions of the Department's scheme (No.1) for encouraging improvement in the Breeds of Horses shall with the necessary adaptations apply to this scheme.

8. The decision of the Department in all matters relating to this scheme shall be final.

March, 1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS TO MEMBERS OF ASSOCIATIONS OF FRUIT
GROWERS.

1. The Department are prepared, subject to the conditions mentioned below, to consider applications for loans for the purchase of fruit trees

by Associations of fruit growers in counties in which the County Committee of Agriculture include in the duties of the Instructors employed under the County Horticultural schemes the affording of such assistance by way of inspection or otherwise, as may be required for the purposes of this scheme.

2. Persons who desire to grow small quantities of fruit, mainly for use in their own homes, are not eligible for loans under this scheme. Facilities for obtaining fruit trees are afforded to such persons under County schemes of Instruction in Horticulture, particulars of which may be obtained from the Secretaries of the County Committees.

3. The main object of this scheme is to encourage Associations of occupiers of land in suitable localities to grow fruit, *particularly apples*, as a farm crop for sale.

4. Applications shall, in all cases, be made on the prescribed forms, which should be duly completed by the applicants and forwarded direct to—The Secretary, Department of Agriculture and Technical Instruction, Upper Merrion Street, Dublin.

Copies of form of application (A. 403) may be obtained free from the Department.

5. The Department cannot undertake that applications received later than 31st October can be dealt with in time to permit of the necessary preliminaries being carried out during the ensuing season.

6. Loans may be granted to members of an Association of fruit growers (not less than ten in number) in the same locality.

7. No loan will be granted to members of an Association unless three members at least participate in the loan, and each such member agrees to plant not less than one statute acre, approximately, of land with fruit trees, mainly apple trees.

8. In the case of a loan being granted to members of an Association, the persons participating in the loan shall enter into a joint and several Bond, in such form as the Department may require, for the repayment of the full amount of the loan, with interest thereon at the rate of three per cent. per annum.

9. The Association shall appoint a Secretary, whose duty will be to conduct all correspondence and business in connection with the scheme, subject to such regulations as the Association may prescribe with the approval of the Department.

10. The Secretary of an Association whose members apply for a loan shall furnish to the Department on the form of application:—

(a) The names and addresses in full of the members of the Association who desire to participate in the loan, particulars of the plots of land proposed to be planted with fruit trees, and the purpose or purposes for which such plots had previously been used ;

(b) Particulars of the number, description, and varieties of fruit trees which the Association propose to plant ;

(c) Particulars of existing fencing and of any additional fencing required in respect of each plot to be planted with fruit trees.

11. No loan will be granted unless the Department are satisfied—

(a) That the plots of land to be planted are suitable as regards soil and situation ;

(b) That, in general, the circumstances of the case are satisfactory ; and

(c) That the loan is to be applied mainly to the purchase of apple trees.

12. The members of the Association participating in the loan shall agree to afford to the Horticultural Instructor of the county in which the land to be planted is situated, and to any other officer of the County Committee or of the Department, such information and facilities for inspection as the County Committee or the Department may require, in order to satisfy themselves in regard to the matters specified in the preceding paragraphs.

13. A loan will not be granted for a less sum than £20.

14. The amount of the loan must be expended wholly in the purchase

of fruit trees, or in the purchase of fruit trees and fencing material and in the erection of stores for fruit, according as the Department may approve in each case. No part of the loan may be applied to defray the whole or any part of the cost of labour required for the fencing, preparing, planting, or cultivating of the plot or plots, or of carting materials for any of these purposes.

15. Before the amount of the loan is advanced by the Department, each member participating in the loan shall sign the necessary Bond, which, in addition to securing the repayment of the loan, shall require the signatories to comply with the following conditions :—

(a) To expend the amount of the loan in the manner and for the purposes approved by the Department ;

(b) To devote to fruit growing the plots of land approved by the Department for the purpose of the loan ;

(c) To prepare the plots in a satisfactory manner ;

(d) To fence the plots in a satisfactory manner, the fencing to be completed before any fruit trees are planted ;

(e) To plant in each of the approved plots fruit trees of the number description, and varieties approved by the Department ; such trees to be purchased from a nurseryman approved by the Department under the County Horticultural scheme ;

(f) To keep the ground around each tree free from grass and weeds for a sufficient distance ;

(g) To keep the fencing in a proper state of repair ; to cultivate the plots, and generally to manage them to the satisfaction of the Department ;

(h) To permit the plots to be inspected at all reasonable times by the Horticultural Instructor for the county, or any officer of the County Committee or of the Department.

16. On receipt of the Bond duly completed, as required by Clause 15, the Department will notify the Secretary of the Association that the loan has been granted, and will advance the loan in such manner as they deem proper. Until such notification is issued any expenditure or liability incurred by the Association or any of its members shall be incurred at their own risk.

17. The amount of the loan shall be repaid in ten equal yearly instalments on the 1st November in each year, together with interest at the rate of three per cent. per annum on the outstanding balance.

18. The Department may at any time require immediate repayment of the full amount of the loan, with interest, if any one or more of the plots approved by the Department for the purpose of the loan are not being maintained in a condition satisfactory to the Department, or if any of the signatories to the Bond sells, assigns, or otherwise disposes of his or her interest in any one or more of the said plots.

19. The members of the Association to whom a loan is granted shall be at liberty to repay the full amount of the loan, with interest, at an earlier period than that provided for in the Bond.

20. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

21. The Department do not accept any responsibility for the success of plots planted with fruit trees purchased by means of loans granted under this scheme.

22. The decision of the Department in all matters relating to these loans shall be final and conclusive.

23. In addition to the loans granted to Associations under the foregoing conditions, the Department may grant loans to individual fruit growers who are desirous of growing fruit on an extensive scale for market in districts where Associations of fruit growers do not exist or cannot be established.

The conditions applicable in the case of loans granted to Associations

of fruit growers shall, with the necessary adaptations, apply in case of loans granted to individual growers, subject to the following modifications :

(a) No loan will be granted to an individual applicant unless the applicant agrees to plant not less than three statute acres with fruit trees ;

(b) No loan will be granted to an individual applicant for a less sum than £10 ;

(c) In the case of a loan being granted to an individual, the borrower, *with two solvent sureties*, shall enter into a bond, in such form as the Department may require, for the repayment of the loan, with interest thereon at the rate of three per cent per annum.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME OF AGRICULTURAL EXPERIMENTS.

Before commencing field experiments and demonstrations each year, each Agricultural Instructor must submit to the Department and the County Committee his plans for the work, showing the number and variety of the experiments and demonstrations which he proposes to conduct and the estimated cost in detail of the seeds, manures and accessories required.

When his proposals have been approved by the County Committee and the Department, the Instructor should, on behalf of the Committee, order the seeds and manures in the requisite quantities. The Instructor must not, of course, obtain goods for which the Committee are liable for payment without authorisation from the Committee to do so. He should take every precaution to ensure that the seeds and manures are of the kinds specified in the scheme, and that the prices charged are not in excess of current market rates. The merchants' accounts are to be carefully examined by him, and he is required to certify as to their accuracy before they are presented to the County Committee for payment. Returns in connection with the experiments of each class (manurial, variety, etc.), on the several crops dealt with should be furnished to the Department on the forms supplied for the purpose immediately after the necessary weighings, etc., have been completed on all the plots of any one class from which reliable results can be obtained. Particulars of all experiments of the same class should be furnished together on one appropriate form, and the averages, etc., indicated on the form fully worked out.

The Instructor should submit to the County Committee, as soon as possible after the completion of his experimental work each season, a report on the results obtained during the season, so that the Committee may obtain the approval of the Department and have the report published prior to the commencement of the following season's field operations.

The experiments are intended as object lessons to farmers in the cultivation, manuring and seeding of land, and should be labelled so that an ordinary observer may be able easily to ascertain what they are intended to show. One label will suffice for each demonstration plot, but in the case of an experiment which includes several plots, a larger label stating the general character of the experiment should be erected in addition to the smaller labels, giving particulars with respect to each of the plots included in the experiments. The labels should be capable of resisting the weather.

No change must be made in any of the manurial experiments as given below, but the Instructor may include such additional plots as local conditions render advisable. In the variety tests, Instructors are required to include all the varieties specified in each list.

Proposed experiments on the feeding of Live Stock are introduced for the first time. In carrying out these experiments, Instructors will meet with many difficulties, and they are advised to undertake at first only a few until they have gained experience of this kind of work.

A.—SCHEME OF THE FIELD EXPERIMENTS.

I.—OAT CROP (Manurial Test).

Size of plots, one-tenth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

NO. OF PLOT.	NO. OF PLOT.
1. No manure.	{ 1 cwt. Sulphate of Ammonia
{ 1 cwt. Sulphate of Ammonia	5. { 3 cwt. Superphosphate.
2. { 2 cwt. Superphosphate.	{ 3 cwt. Kainit.
{ 2 cwt. Kainit.	{ 1 cwt. Sulphate of Ammonia.
{ 1 cwt. Sulphate of Ammonia.	6. { 3 cwt. Superphosphate.
3. { 3 cwt. Superphosphate.	{ 4 cwt. Kainit.
{ 2 cwt. Kainit.	7. { 5 cwt. of mixture of artificials
{ 1 cwt. Sulphate of Ammonia.	{ applied to Plot 5.
4. { 4 cwt. Superphosphate.	
{ 2 cwt. Kainit.	

II.—OAT CROP (Variety Test).

Size of plots not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

NO. OF PLOT.	NO. OF PLOT.
1. Potato.	5. Tartar King.
2. Black Tartarian.	6. Banner.
3. Abundance.	7. Any other varieties.
4. Waverley.	

III.—BARLEY CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

NO. OF PLOT.	NO. OF PLOT.
1. Archer's Chevallier.	3. Any other Varieties.
2. Gokithorpe.	

IV.—WHEAT CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

NO. OF PLOT.	NO. OF PLOT.
1. Red Fife.	4. White Queen.
2. Red Chaff White.	5. Any other varieties (preferably
3. White Stand-up.	include Square-head Master).

V.—TURNIP CROP (Manurial Test with Farmyard Manure).

Size of plots, one-twentieth of a statute acre.

NO. OF PLOT.	NO. OF PLOT.
1. 15 tons farmyard manure.	5. { 15 tons farmyard manure.
2. { 15 tons farmyard manure.	{ 4 cwt. Basic Slag.
{ 4 cwt. Superphosphate.	6. { 15 tons farmyard manure.
3. { 15 tons farmyard manure.	{ 5 cwt. Basic Slag.
{ 5 cwt. Superphosphate.	7. { 15 tons farmyard manure.
4. { 15 tons farmyard manure.	{ 6 cwt. Basic Slag.
{ 6 cwt. Superphosphate.	

VI.—TURNIP CROP (Manurial Test without Farmyard Manure).

Size of plots, one-twentieth of a statute acre.

No. of PLOT.		No. of PLOT.	
1.	{ 4 cwt. Superphosphate, 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	4.	{ 4 cwt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
2.	{ 5 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	5.	{ 5 wt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
3.	{ 6 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	6.	{ 6 cwt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
		7.	{ 6 cwt. of mixture of artificials applied to Plot 1.

VII.—TURNIP CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested :—

SWEDES.

No. of PLOT.		No. of PLOT.	
1.	Improved Purple Top.	5.	Elephant.
2.	Best of All.	6.	Incomparable Green Top (Garton).
3.	Magnum Bonum.	7.	Any other varieties.
4.	Triumph.		

YELLOW TURNIPS.

8.	Centenary.	10.	Any other varieties.
9.	Aberdeen Green Top.		

VIII.—MANGEL CROP (Manurial Test).

Size of plots, one-twentieth of a statute acre.

No. of PLOT.		No. of PLOT.	
1.	20 tons farmyard manure.		20 tons farmyard manure.
2.	{ 20 tons farmyard manure. 3 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	6.	{ 4 cwt. Superphosphate. 3 cwt. Sulphate of Ammonia. 4 cwt. Salt.
3.	{ 20 tons farmyard manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	7.	{ 20 tons farmyard manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 2 cwt. Salt.
4.	{ 20 tons farmyard manure. 5 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	8.	{ 20 tons farmyard manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 6 cwt. Salt.
5.	{ 20 tons farmyard manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 4 cwt. Salt.	9.	{ 20 tons farmyard manure. 7½ cwt. of mixture of artificials applied to Plot 3.

IX.—MANGEL CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested :—

No. of PLOT.		No. of PLOT.	
1.	Yellow Globe.	4.	Long Red.
2.	Prize Winner.	5.	Any other varieties.
3.	Golden Tankard.		

X.—POTATO CROP (Manurial Test).

Size of plots, one-twentieth of a statute acre.

No. of PLOT.	No. of PLOT.
1. 15 tons farmyard manure.	6. { 15 tons farmyard manure. 4 cwt. Superphosphate.
2. { 15 tons farmyard manure. 3 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.	7. { 15 tons farmyard manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1½ cwt. Muriate of Potash.
3. { 15 tons farmyard manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.	8. { 15 tons farmyard manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 2 cwt. Muriate of Potash.
4. { 15 tons farmyard manure. 5 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.	9. { 15 tons farmyard manure. 4½ cwt. of mixture of arti- ficials applied to Plot 3.
5. { 15 tons farmyard manure. 4 cwt. Superphosphate. 1½ cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.	

XI.—POTATO CROP (Variety Test).

Size of plots, one-twentieth of a statute acre.

The following varieties to be tested :—

<i>Maincrop.</i>	<i>Mid-Season.</i>
No. of PLOT.	No. of PLOT.
1. Up-to-Date.	9. British Queen.
2. Duchess of Cornwall.	10. Abundance.
3. Factor.	11. Any other varieties.
4. Irish Queen.	
5. Shamrock.	
6. White City.	
7. Old Champion.	
8. Any other Varieties.	

XII.—POTATO CROP (Boxing Test).

Size of plots, one-twentieth of a statute acre.

No. of PLOT.
1. "Seed" boxed before December 1st.
2. Unsprouted Seed.

XIII.—POTATO CROP (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following will be compared :—

(120 gallons of mixture to be applied per statute acre at each spraying.)

No. of PLOT.
1. Unsprayed.
2. Effect of a 1 per cent. lime or Bordeaux mixture, double application.
3. Effect of a 2 per cent. lime or Bordeaux mixture, single application.
4. Effect of a 2 per cent. lime or Bordeaux mixture, double application.
5. Effect of a 1 per cent. soda or Burgundy mixture, double application.
6. Effect of a 2 per cent. soda or Burgundy mixture, single application.
7. Effect of a 2 per cent. soda or Burgundy mixture, double application.

XIV.—DESTRUCTION OF CHARLOCK (PRESHAUGH) AND OTHER WEEDS (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following solutions will be tested :—

No. OF PLOT.

1. Unsprayed.
2. 50 gallons 3 per cent. Sulphate of Copper.
3. 80 gallons 3 per cent. Sulphate of Copper.

XV.—MEADOW HAY CROP (Manurial Test for one year).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.

1. No manure.
2. 10 tons Farmyard Manure.
3. 1 cwt. Nitrate of Soda.
4. { 1 cwt. Nitrate of Soda.
2 cwt. Superphosphate.

No. OF PLOT.

5. { 1 cwt. Nitrate of Soda.
2 cwt. Superphosphate.
2 cwt. Kainit.
6. { 1 cwt. Nitrate of Soda.
2 cwt. Basic Slag (high grade).
2 cwt. Kainit.

The Basic Slag to be applied in February at the same time as the Kainit and Superphosphate are being applied to the different plots in the experiment.

XVI.—IMPROVEMENT OF SECOND CLASS PASTURE.

Improvement to be estimated by Observation.

Size of plots, one-quarter of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.

1. 5 cwt. Basic Slag.
2. { 5 cwt. Basic Slag.
2 cwt. Kainit.
3. 10 cwt. Basic Slag.

No. OF PLOT.

4. { 10 cwt. Basic Slag.
2 cwt. Kainit.
5. 5 cwt. Potassic Superphosphate.
6. 10 cwt. Potassic Superphosphate.

XVII.—INFLUENCE OF SEED MIXTURES IN FORMING PASTURE.

Land selected to be left in grass for not less than two years.

Size of plots, not less than one-tenth or more than one-fourth of a statute acre.

The following mixtures to be tested :—

Plot 1.

- 1 bushel Italian Rye Grass (22 lb. per bushel).
- $\frac{1}{2}$ bushel Perennial Rye Grass (28 lb. per bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

Plot 2.

- 1 bushel Perennial Rye Grass (28 lb. per bushel).
- $\frac{1}{2}$ bushel Italian Rye Grass (22 lb. per bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

Plot 3.

- 18 lb. Perennial Rye Grass.
 9 lb. Italian Rye Grass.
 3 lb. Timothy.
 3 lb. Cocksfoot.
 4 lb. Broad Red Clover.
 2 lb. Alsike Clover.
 1 lb. White Clover.

Plot 4.

- 15 lb. Perennial Rye Grass.
 7 lb. Italian Rye Grass.
 4 lb. Meadow Fescue.
 3 lb. Timothy.
 3 lb. Cocksfoot.
 4 lb. Broad Red Clover.
 2 lb. Alsike Clover.
 2 lb. White Clover.

Plot 5.

At the discretion of the Instructors the following mixture (Elliot's) may be tested, but only on poor thin land:—

	Quantity of Seed per acre. lb.
Cocksfoot	10
Meadow Fescue	5
Tall Fescue	4
Tall Out-like Grass	3
Hard Fescue	1
Rough-stalked Meadow Grass	$\frac{1}{2}$
Smooth-stalked Meadow Grass	1
Golden Out Grass	$\frac{1}{2}$
Italian Rye Grass	3
White Clover	2
Alsike Clover	1
Late-flowering Red Clover	2
Kidney Vetch	$2\frac{1}{2}$
Chicory	3
Burnet	8
Sheep's Parsley	1
Yarrow	$\frac{1}{2}$

48

XVIII.—LIQUID MANURE EXPERIMENTS.

(a) On First Crop Hay or Old Meadow, preferably the former.

Size of Plots, one-sixteenth of a statute acre (for small farms each plot may be one-fortieth of a statute acre).

The following kinds and quantities of manures will be used per statute acre:—

No. of Plot.

1. No manure.
2. 16 tons Farmyard Manure, applied before 15th February.
3. 16 tons Liquid Manure, applied one-half in February and one-half in April.
4. { 1 cwt. Nitrate of Soda, applied during last half of March.
 { 2 cwt. Superphosphate } applied before 15th February.
 { 2 cwt. Kalnit. }

(b) On Cabbages

No. of Plot.

1. No Manure—size of plot, 1 square perch.
2. 20 tons Farmyard Manure—size of plot, 4 square perches.
3. 20 tons Liquid Manure—size of plot, 4 square perches.

B.—SCHEME OF EXPERIMENTS IN THE FEEDING OF LIVE STOCK.

PIGS.

I.—EXPERIMENT TO ASCERTAIN WHETHER PIGS CAN PROFITABLY BE FATTENED WITHOUT POTATOES.

Lot 1. Potatoes, Indian meal and pollard.

Lot 2. Indian meal and pollard.

Both lots to receive the same mixture of meals, and it is suggested that equal parts of Indian meal and pollard be used at the commencement of the experiment. Separated milk or buttermilk may be given provided both lots are treated alike in this respect. Potatoes must be the only varying factor in this experiment.

II.—EXPERIMENT WITH HOME-GROWN v. IMPORTED FEEDING STUFFS.

Lot 1. Potatoes and home-grown food, viz., barley meal.

Lot 2. Potatoes and imported food, viz., Indian meal.

Separated milk or buttermilk may be given provided both lots are treated alike in this respect.

In both the above experiments not less than three animals are to be included in each lot. Maximum number of animals in each lot must depend on funds at disposal of the Instructor.

Animals to be weighed at commencement and at end of experiment.

CATTLE.

III.—EXPERIMENT ON FEEDING CALVES.

Lot 1. Calf meal recommended by Department in leaflet No. 54, viz. :—

2 parts by weight of oatmeal ;

2 do. do. maize meal ;

1 do. do. pure ground flax seed.

Lot 2. Same as for Lot 1, except that wheatmeal should be substituted for oatmeal in the mixture.

A small allowance of linseed cake to be given to the calves in both lots.

Minimum number of calves in each lot, 3.

Maximum number must depend on funds at the disposal of the Instructor.

Animals to be weighed at commencement and at the end of experiment.

IV.—EXPERIMENT ON THE FATTENING OF CATTLE ON GRASS.

Experiment with home-grown v. imported feeding stuffs.

Lot 1. Home-grown foods, viz., mixture composed of :—

2 parts wheat meal ;

3 parts barley meal ;

4 parts ground oats.

Lot 2. Imported foods, viz., mixture composed of :—

2 parts undecorticated cotton cake ;

1 part Indian meal.

Quantity of mixtures fed to commence at 3 lb. per head daily and increase to 5 lb. per head daily.

Experiment to start in May and continue for ten or twelve weeks.

Lots to be fed in two fields and interchanged fortnightly.

Minimum number of cattle in each lot, 4.

Maximum number to depend on funds at Instructor's disposal.

Cattle to be weighed at commencement and end of experiment.

V.—EXPERIMENT ON THE FATTENING OF CATTLE IN STALLS:

Lot 1. Home-grown foods, viz., mixture composed of:—

2 parts wheat meal;

3 parts barley meal;

4 parts ground oats.

Lot 2. Imported foods, viz., mixture composed of:—

1 part decorticated cotton cake;

2 parts Indian meal.

Linseed cake to be supplied to Lot 2 in last stage of fattening. All animals to get roots and fodder in addition. Quantity of mixtures fed to commence at 3 lb. and increase to a maximum of 8 or 10 lb. per head daily.

Minimum number of cattle in each lot, 4.

Maximum number of animals in each lot to depend on funds at Instructor's disposal.

Cattle to be weighed at commencement and end of experiment.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

NEW SCHEME OF FIELD MANURIAL EXPERIMENTS.

Experiments I. to V. inclusive are to be conducted on peat soils only. In each case a sample of the soil, to be analysed for organic matter, is to be taken before the plots are laid down.

Experiment VI. is to be conducted in seaboard localities only.

I.—OATS.

Size of plot, one-tenth Statute acre.

The following kinds and quantities of manures will be used per statute acre:—

NO. OF PLOT.		NO. OF PLOT.	
1.	{ 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 3 cwt. Kainit.	3.	{ 3 cwt. Superphosphate. 3 cwt. Kainit.
2.	{ 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 3 cwt. Kainit.	4.	{ 1 cwt. Sulphate of Ammonia. 3 cwt. Slag. 3 cwt. Kainit.

II.—TURNIPS.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre:—

NO. OF PLOT.		NO. OF PLOT.	
1.	15 tons Farmyard Manure.	5.	{ 15 tons Farmyard Manure. 4 cwt. Slag.
2.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate.		{ 2 cwt. Kainit.
3.	{ 15 tons Farmyard Manure. 4 cwt. Slag.	6.	{ 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia.
4.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Kainit.	7.	{ 3 cwt. Kainit. 4 cwt. Slag. 1 cwt. Sulphate of Ammonia.
			{ 3 cwt. Kainit.

III.—MANGELS.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.		No. OF PLOT.	
1.	20 tons Farmyard Manure.	4.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate.
2.	{ 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Kainit.	5.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.
3.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 4 cwt. Kainit.		

All manures to be applied before seed is sown.

IV.—POTATOES.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.		No. OF PLOT.	
1.	15 tons Farmyard Manure.	5.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia.
2.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia. 4 cwt. Superphosphate. 1 cwt. Muriate of Potash.	6.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia. 4 cwt. Superphosphate. 2 cwt. Muriate of Potash.
3.	{ 15 tons Farmyard Manure. $\frac{1}{2}$ cwt. Sulphate of Ammonia. 4 cwt. Superphosphate. 1 cwt. Muriate of Potash.	7.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia. 4 cwt. Slag. 1 cwt. Muriate of Potash.
4.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate. 1 cwt. Muriate of Potash.		
		8.	{ $1\frac{1}{2}$ cwt. Sulphate of Ammonia. 6 cwt. Superphosphate. $1\frac{1}{2}$ cwt. Muriate of Potash.

V.—MEADOW HAY EXPERIMENT.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.		No. OF PLOT.	
1.	{ 1 cwt. Nitrate of Soda. 2 cwt. Superphosphate. 2 cwt. Kainit.	2.	{ 1 cwt. Nitrate of Soda. 2 cwt. Slag. 2 cwt. Kainit.
3.	{ $\frac{1}{2}$ cwt. Nitrate of Soda. 4 cwt. Slag. 2 cwt. Kainit.		

VI.—POTATOES.

MANURIAL TEST WITH SEAWEED FOR SEABOARD LOCALITIES.

Plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre:—

No. OF PLOT.		No. OF PLOT.	
1.	15 tons Farmyard Manure.	4.	{ 15 tons Seaweed.
2.	15 tons Seaweed.		{ 4 cwt. Superphosphate.
	15 tons Seaweed.		{ 1 cwt. Muriate of Potash.
3.	{ 1 cwt. Sulphate of Ammonia.	5.	{ 15 tons Seaweed.
	{ 4 cwt. Superphosphate.		{ 1 cwt. Sulphate of Ammonia.
	{ 1 cwt. Muriate of Potash.		{ 4 cwt. Superphosphate.
	6.	{ 15 tons Seaweed.	
		{ 4 cwt. Superphosphate.	

Class of Seaweed used should be noted, and also whether used fresh or dried.

VII.—EXPERIMENT WITH LIME.

Size of plot, half statute acre.

To be applied to stubble after lea oats.

Plot 1, Slaked lime (slaked with water and applied in form of powder), 2 tons per statute acre.

Plot 2, Ground burnt lime. Quantity used to cost same amount as lime used on Plot 1.

Plot 3, Ground limestone. Quantity used to cost same amount as lime used on Plot 1.

A.B. Memo. No. 14.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SEED TESTING.

(MEMORANDUM FOR INFORMATION OF RETAILERS OF AGRICULTURAL SEEDS).

The attention of the Department having recently been drawn to certain difficulties which occur in the interpretation of the results of tests of agricultural seeds made at various seed testing stations, the following memorandum is issued with a view to making matters clear on this subject.

The difficulties alluded to are concerned almost exclusively with the seeds of grasses, and, to a lesser degree, those of clovers, and arise from the fact that the results of tests made at the Department's Seed Testing Station of samples of such seeds do not always closely coincide with those obtained for similar samples at other seed testing stations, particularly some of the more widely known stations on the Continent.

It may be stated at once that the differences in question are not necessarily due to inaccuracies in the actual tests made at these stations, but they depend on the fact that the principles upon which the methods of testing are based are not everywhere the same.

The Department lay great stress on the fact, which is frequently overlooked, that a correct idea of the quality of a sample of seed cannot be obtained from a knowledge of the percentage of germination (or "growth")

alone, but that the purity of the same must also be taken into consideration (see Leaflet No. 59, *The Testing of Farm Seeds*). It is, however, of little use to know what the percentage of purity of a sample is stated to be unless the meaning of the term "purity" is first clearly defined and agreed upon.

At the Department's Station all the seeds in a sample which are or purport to be of the kind of which the sample is stated to consist are regarded as pure seed, and the percentage weight of such seeds present in the sample constitutes the percentage of purity of that sample. The impurities (which are removed from the sample with scrupulous care during the carrying out of the purity test) consist of foreign matter such as sand, dirt and other such debris, as well as of the seeds of plants, whether weeds or other wise, other than those of the particular kind specified in the designation of the sample.

At many Continental and other seed testing stations the definition of what constitutes the pure seed in samples of some kinds of grass seeds coincides with that adopted by the Department, but it is applied only in the case of certain very small seeds such as those of some of the Meadow Grasses (Poa) and other seeds which are not commonly or largely used in the ordinary routine of farming in Ireland, and which the Department do not undertake (except in special circumstances) to test. With regard to the larger and more ordinary grass seeds, however, such as those of the Rye Grasses, Cocksfoot, etc., most of the stations referred to have adopted an entirely different method of determining their purity, based upon a totally different idea as to what the impurities in the sample consist of. Not only are the real impurities, as defined above, treated as such, but so are also all those seeds in the sample which do not possess or appear not to possess a kernel, or "caryopsis" as it is technically called, in spite of the fact that these seeds are of the kind named in the description of the sample. It follows, therefore, that when this method is employed for carrying out a purity test the weight of the impurities in a given sample must be greater (and, therefore, the percentage of purity *less*) than when the same sample is analysed for purity according to the principles adopted by the Department. In other words, the results of the tests made at the Department's Seed Testing Station of samples of such kinds of grass seeds tend always to be *higher* as regards percentage of purity than those obtained where what may be called the "continental" method is adopted, a fact which has commonly been ignored completely by those who have been foremost in complaining of discrepancies in the results of seed analyses. Since, however, the seeds necessary for the germination tests are taken, at all stations alike, from the seed after the impurities (however they may be defined) have been removed, it will be evident that not only are differences in the percentages of purity involved, but different results are also bound to follow in the percentages of germination. For when, as in the "continental" method of purification, the real impurities in a sample have first been removed, and when to them the empty or presumably empty seeds have been added, there remains a quantity of *selected* seed, from which the requisite number of seeds for the germination test are taken. It stands to reason that the percentage of germination of such seeds must be higher, in many cases considerably higher, than would be the case if the seeds for the germination test were taken from the seed after the real impurities only had been removed. Hence the percentages of germination obtained by the "continental" methods always tend to be higher than those obtained for the same samples by the methods employed at the Department's Seed Testing Station.

It will be evident, therefore, that it is absolutely necessary when comparing the percentages of germination and of purity obtained by different seed testing stations for the same or similar samples of seed, to ascertain whether the principles underlying the methods of testing adopted by the

stations in question are identical, otherwise comparison of numerical results is useless. In general the results given by the Department's Seeds Testing Station for the classes of seeds mentioned cannot be strictly compared with those given by most of the continental and other stations, although in both cases the results, when considered separately, may give a correct indication of the quality of the seed, but from different points of view.

As regards the question of the accuracy with which the actual tests are carried out, it may be stated that at the Department's Station a method of control is employed which secures that the results shall be as absolutely reliable as possible, and which, so far as is known, is not in vogue at any other station in the world. This consists in the testing for germination, at the same time, and side by side with the sample being tested, of a check or "control" sample of the same kind of seed, the behaviour of which is already well known from previously repeated testings. Should such control not germinate up to the required standard, the test is rejected and a fresh one made. By this means it is possible to secure that the actual conditions under which each germination test is carried out shall be correct.

As may be supposed, the Department would not deliberately have adopted and employed for more than ten years the principle upon which their methods are based without a very careful consideration of the matter in all its bearings, and without possessing strong reasons in support of their procedure. Some of these are as follows:—

1. In the case of seeds of the highest quality the proportion of empty individuals in the sample is but small, and the Department's method of testing gives the high results characteristic of such seeds, and these differ but little, if at all, from those obtained by the "continental" method.
2. In general, in judging a sample of seed, more stress is apt to be laid by the merchant or farmer on its percentage of germination than on its percentage of purity. It is, therefore, desirable that the quality of the seed should make itself evident and find clear expression in the percentage of germination. This is the case where the Department's method of testing is employed, but less so where the continental method is adopted.
3. By the Department's method the *actual seed as supplied to the farmer*, and as it will be sown by him is tested for germination, whereas by the continental method *selected seed* is employed for this test, and, consequently, the percentage of germination of a sample of second or even third class quality of seed may appear to be high, and may, if germination mainly be taken into account, give quite an erroneous idea of the quality of the seed.
4. Another reason in favour of the Department's method lies in the fact that it is quite impossible to distinguish with accuracy in every case (even with the help of the best optical appliances available) between an "empty" and a "filled" grass seed, the fact being that no such strict line of division actually exists, "filled" seeds being connected with "empty" seeds by a series of gradations of intermediate forms. The Department's method totally avoids this cause of inaccuracy.
5. The separation of "empty" from "filled" seeds as carried out by the continental method must of necessity be dependent largely upon the individuality of the person making it. The Department, apart altogether from the undesirability of testing only *selected* seeds for germination, claim that by the method adopted by them the personality of the tester is entirely eliminated.
6. According to the Department's principle there is but one and only one idea underlying the term "purity." On the continental principle the idea of "purity" differs according as to whether samples of the larger

grass seeds are under consideration or those of the smaller ones, an illogical position to assume.

It may be useful to consider briefly to what extent concordant results may reasonably be expected from successive tests of the same sample, or of similar samples from the same bulk, made at the same seed testing station, or at two or more stations where identical methods of testing are practised. *Absolutely identical* results as regards purity and germination are of course entirely out of the question, because it is quite impossible to take successive portions from a sample each of which shall possess exactly the same numerical proportion of living to dead seeds as the others, and as are contained in the whole sample itself. The chances of variation are greatest when the proportions of living to dead seeds are numerically equal in the sample, and they diminish by degrees according as the proportion of the living or the dead seeds respectively increases. Hence it follows that the unavoidable variations in the results of germination tests will be *least* when the seeds are of the very highest germinating quality, and also when they are of the very worst. On the other hand, these differences will be *greatest* in those inferior samples which contain living and dead seed in about equal proportions. These variations exist quite independently of the actual experimental details of the tests themselves, the accuracy of which may be assumed as complete.

From mathematical considerations, combined with the actual results obtained in large series of tests, it is possible to estimate very closely the degree of variation which may reasonably be expected to occur at any given percentage of germination between two or more such tests of a sample of seed carried out at the same station, or at two stations where identical methods of testing are employed, and these variations can be tabulated and will then serve as a table of latitudes. Up to the present, however, no such table has been formulated as universally applicable to all seed testing stations, and the Department have no intention of prescribing definite limits of variation, but the accompanying table is given as an example of one which has met with wide acceptance.

TABLE OF LATITUDES.

When the percentage of germination is, or lies between	The latitude above or below this percentage of germination allowable between two tests is
99.9 and 95	4.2
94.9 " 90	5.7
89.9 " 85	6.8
84.9 " 80	7.7
79.9 " 75	8.3
74.9 " 70	8.8
69.9 " 65	9.1
64.9 " 60	9.4
59.9 " 55	9.4
54.9 " 50	9.6

Where tests are made of two or more different samples from the same bulk, the differences may be expected to be greater, and they will depend almost entirely upon the care exercised that the samples are taken in such a way that each of them shall be really representative of the whole bulk. Where tests are made by two or more stations, not employing the same methods of testing, comparison of the results of the tests even of one and the same sample is quite useless.

Before making any complaints therefore, as to lack of concordance between the results of germination tests, those concerned should first consider such a table as this, and ascertain whether the differences fall within reasonable limits.

In regard to the results of tests of clover seeds, a difficulty sometimes crops up in connection with what are known as "hard" seeds. A certain percentage of the seeds of clovers (and of other leguminous plants), owing to the impervious nature of their seed coats, do not absorb water or become soft during the germination test, but remain small and hard, and do not germinate within the time allotted to the test. Although the presence of a considerable proportion of hard seeds is an undesirable feature in a sample, yet all of such seeds are not necessarily to be regarded as useless, for some of them may germinate after a time when they are sown in the soil. It is customary at some seed testing stations (and this is the case at the Department's Station) to state separately in the report on the sample the actual percentage of germination of the seed, and the percentage of hard seeds present in the sample, and this is to be regarded as the most desirable practice. At other stations a proportion of the percentage of hard seeds is added to the actual percentage of germination, so that the total is increased. The proportions added are frequently one-half the percentage of hard seeds, in the case of Red Clover, and one-third of it in White and Alsike Clovers. In comparing the results of tests of clover seeds, therefore, it is necessary to ascertain whether a proportion of the hard seeds has been added to the actual percentage of germination or not before drawing any conclusions. Means have been found and are successfully employed by some seed houses to get rid of hardness in clover seeds, so that in the samples of clover seed supplied by such houses hard seeds are absent or practically so. The proportion of hard seeds present varies with the kind of clover and also with the season, but average numbers for Red Clover may be reckoned as about 8 per cent., for Alsike Clover 9 per cent., and for White Clover 13 per cent.

With regard to clover seeds also the personal element of the tester comes into play in the case of some continental and other stations. Samples of these seeds frequently contain considerable quantities of small and shrivelled seeds. These seeds are, of course, true clover seeds, and at the Department's Station they remain with the pure seed from which the seeds for the germination test are taken, and are not considered as impurities. At some of the other stations, however, such small and wrinkled seeds (which, of course, germinate very badly, or not at all) are removed and treated as impurities, and, consequently, the germination test is carried out, just as in the case of grass seeds, on *selected* seed, and the results are necessarily higher, while the percentage of purity is lower. The results, therefore, depend upon the judgment of the tester, who has to decide whether a clover seed is good enough to be selected for germination, or whether it must be regarded as sufficiently small or inferior to justify its classification as an impurity. By the Department's method this uncertainty is completely eliminated and accuracy ensured.

When purchasing seeds farmers should ask for statements or guarantees as to the percentages of purity and germination of them. It is, furthermore, highly desirable that in the case of grass and clover seeds particularly, they should insist that such statements should be based on tests carried out by the Department's Seed Testing Station, or on tests in which their methods of testing are employed. In particular they should not be led away by the apparently high-looking results of germination tests, often given in connection with seeds offered for sale, but determined according to continental methods in which only *selected* seed is used for the germination test, as such numbers often convey an erroneous impression of the value of the seed for sowing purposes.

October, 1911.

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN,

3rd February, 1912.

No. A. 467-12.

Weeds and Agricultural Seeds (Ireland) Act, 1909.

SIR,—Adverting to previous correspondence in regard to the extension of the provisions of Part I. of the above Act to your county, I have to transmit herewith for the consideration of the County Council the accompanying copy of a resolution unanimously adopted at the meeting of the Council of Agriculture held on the 30th May last.

In again directing attention to this matter, the Department would point out that Orders made under Part I. of the Act are at present in operation in nineteen counties and two county boroughs, and have been attended with very beneficial results.

In the event of the Council deciding to consent to the putting into force of this part of the Act in your county, it is suggested that the resolution of consent should follow the lines of the accompanying draft.

I have to request that, in any case, you will kindly inform the Department, as early as possible, of your Council's decision in this regard.

I am,

Sir,

Your obedient servant,

T. P. GILL,
Secretary.

Secretary,

County Council.

DRAFT RESOLUTION.

That this Council hereby consent to an Order being made by the Department of Agriculture and Technical Instruction for Ireland, declaring that through out the County of _____ all plants of the following species,
viz. :—* _____ are noxious
weeds for the purposes of the Weeds and Agricultural Seeds (Ireland) Act, 1909.

* Here insert names of Weeds.

RESOLUTION ADOPTED AT COUNCIL MEETING OF 30TH MAY, 1911.

"That in the opinion of this Council it is of supreme importance to the agriculture of this country that every County Council in Ireland should co-operate with the Department in putting into force Part I. of the Weeds and Agricultural Seeds (Ireland) Act, 1909, which relates to the destruction of noxious weeds, and that we strongly urge those Councils which have not yet signified their consent to the issue of an Order under the Act, to do so at the earliest possible moment."

DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

June, 1912.

No. A. 11085-12. (Circular.)

Weeds and Agricultural Seeds (Ireland) Act, 1909.

SIR or MADAM,—I have to remind you that a Noxious Weeds Order, made under the provisions of Part I. of the above Act, is in force in your County. All residents in the County are, therefore, required by Statute to cut down, or otherwise destroy, all noxious weeds (as defined in the Order) which may be growing on their lands.

The most convenient time for the destruction of these weeds would appear to be the early summer, about the middle of June, before hay harvesting operations are entered upon. The Department would, therefore, recommend that the work of eradicating the weeds should be commenced as soon as possible.

The Department will arrange for a special inspection at an early date of all lands in those counties in which Noxious Weeds Orders are in force, and the names of all occupiers on whose lands weeds are found to be growing will be submitted by the Inspectors to the Department who will exercise the powers conferred upon them by the Act for compelling the destruction of the scheduled weeds.

Last year in a few instances in which the requirements of Notices served under Section 2 of the Act were ignored the Department were obliged to institute legal proceedings, with the result that in all cases fines were imposed and costs awarded against the persons in default. They trust that occupiers of land will, of their own accord, this season take the necessary steps to destroy all harmful weeds on their lands at the earliest possible opportunity, and so render unnecessary any legal action by the Department.

I am,

Sir or Madam,

Your obedient servant,

T. P. GILL,
Secretary.

To the person named in the address.

A.B. Memo. No. 11.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

TESTING EGGS FOR FRESHNESS.

Buyers of eggs complain that during the summer and autumn months cases of Irish eggs frequently contain a large proportion of stale and bad eggs. Shippers who desire to maintain a high reputation and to be in a position to guarantee their eggs as new laid should, therefore, test as to freshness all eggs passing through their hands during these months. The adoption of this practice would appear to be absolutely necessary if Irish shippers wish not merely to improve their position on British markets, but to hold that which they at present occupy.

Eggs should be tested for freshness by holding them in the beam cast by a partially shaded light in a room from which other light has been excluded. A simple arrangement is to cut a round hole of one inch in

diameter in a tin or other cylinder within which a lamp giving a bright light is to be placed. If it is desired that two operators should test eggs at the same lamp, a second hold should be cut in the cylinder in such a position that a second beam of light shall be cast opposite to or in a different direction from the other. Each egg to be tested should be turned completely round so as to permit of its thorough examination while it is held in the beam of light close to the hole through which the light is emitted, the operator meanwhile standing to one side of the beam of light. Various adaptations of electric, gas, and oil lamps and candles may be used for testing. An operator should with a moderate amount of practice be able to examine carefully 100 dozen eggs per hour in the manner described. The size of the air space which forms at the larger end of an egg is the surest guide as to its age and condition. If an egg is kept in a warm place, the air space in it will increase in size more rapidly than if it is kept in a cool one, but under ordinary conditions of weather in Ireland the air space in an egg which has been kept in a suitable place will not exceed the area of a three-penny piece when the egg is four days old. In exceptional instances the air space in new laid eggs may be larger, but if the air space exceeds in area the size of a sixpenny piece the egg should not be regarded as "new laid."

When an egg is fresh and in good condition the white is bright and clear, and the yolk is in the centre. If, when an egg is turned by the hand, the yolk swings out towards the shell, the egg is either not fresh or it is weak and should not be classed as "new laid."

An egg should be rejected as unsuitable for human consumption if on examination in a beam of light it presents any of the following appearances :—

1. It is opaque or black ;
2. The white is dull and cloudy, and the yolk cannot be distinguished
This usually indicates a broken or spread yolk, and the egg is known as "spent" ;
3. The yolk is anywhere in contact with the shell. An egg in this condition is described as "sided." Contact is denoted by a small spot on the inner side of the shell, and also by the fact that when the egg is turned the yolk does not move with it.
4. It contains large blood spots, or has spots under the shell caused by dampness.

The method of testing eggs by placing them over a bright light on perforated trays, made to carry 120 eggs, will at once indicate a black or rotten egg, but as neither the size of the air space nor the position of the yolk can be readily ascertained by this means it does not afford any reliable indication as to an egg being stale.

It is believed that if, when prices are rising, Irish shippers generally would test eggs in the manner suggested above, it would very soon greatly enhance the reputation of Irish eggs on British markets, with corresponding benefit to Irish producers and shippers.

TECHNICAL INSTRUCTION.

PROGRAMME OF EXPERIMENTAL SCIENCE, DRAWING, MANUAL INSTRUCTION, AND DOMESTIC ECONOMY FOR DAY SECONDARY SCHOOLS.

I.

EXPLANATORY CIRCULAR TO MANAGERS AND PRINCIPALS OF DAY SECONDARY SCHOOLS.

DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN,

June, 1912.

SIR OR MADAM,

The Regulations for the teaching of Experimental Science, Drawing, Manual Instruction and Domestic Economy in Day Secondary Schools, which were in operation during the academic year 1911-12, will continue in force during the year 1912-13 with the following alterations :—

- (1) Regulation 9 has been extended so as to permit students, who have worked satisfactorily through the Third Year Syllabus of Mechanics, to proceed directly to the Fourth Year Syllabus (Course B) of Physics.
- (2) Regulation 23 has been cancelled.

The Syllabuses of the courses of instruction, as well as the Prefatory Note to the Syllabuses in Experimental Science, may be obtained separately for distribution among teachers.

A practice of permitting students who are not of age to be eligible for grants under this Programme, to attend instruction in the First Year Syllabuses of the Preliminary Course has been observed in some schools. The Department will, as a rule, require that these students shall in future repeat the work of the First Year Syllabuses if claims in respect of their attendances at instruction in the subjects of the Programme are to be made in subsequent years. Should any of such students, however, be presenting themselves for examination in the Junior Grade at the Intermediate Examinations in the year in which they will first become eligible for grants under the Programme, they will be permitted to proceed to the Second Year Syllabuses provided that the Inspector is satisfied that they have made such progress as would enable them to take, with advantage, the work of that year.

In regard to the cases of pupils who may, under Regulation III., 16, be working a second time through any Syllabus of the Programme, attention is directed to the fact that pupils who are capable of profiting by promotion to a higher course should not be permitted to repeat the previous year's course. The Department will withhold grants in respect of instruction given to pupils who may repeat the course of any year if, in the opinion of the Inspector, those pupils had made such progress as would enable them to take, with advantage, the work prescribed for the subsequent year, and in no case will pupils who were presented to the Department's Inspectors for the practical test for Honours Candidates, in connection with the examinations of the Intermediate Education Board for Ireland, be accepted for grants on account of a repetition of the same course.

The Department will require that Form S. 121, containing a list of all students following their Programme who are registered as in attendance

at instruction on the 1st November, shall be submitted by the 5th November. This form will be dealt with by the Department and returned to the Managers in order that they may furnish thereon the further information required by the Department in respect of students presenting themselves for Experimental Science at the examination of the Intermediate Education Board.

The efficiency of instruction will, as hitherto, be tested by inspection, as a rule, without notice. It is however proposed that Special Inspections of a more thorough character shall be held, of which due notice will be given to the School Managers. It is intended that such inspections shall not, as a rule, be held more frequently than once in three years for any one school. During the latter part of the school session notice will be given of a visit mainly for the purpose of holding the qualifying practical tests for candidates for Honours in the subjects of the Programme at the Intermediate Examinations. This visit may, however, be dispensed with where there are no Honours Candidates to be presented. At any visit it will be within the discretion of the Inspector to test any or all of the classes by practical exercises in the laboratory; by the examination of note books, etc.; by *visu voce* examination of classes or of individuals; by written examinations, or by a combination of these methods.

It should be observed that the rates of payment may be increased by one-tenth or reduced by one or more tenths, as the Department, on consideration of the Inspector's report, may determine. Reduction by more tenths than one will be exceptional. In cases in which such exceptional treatment is necessary, the Department will consider the desirability of removing the School from the list of those aided by their grants.

The Department reserve the right to withdraw recognition of a teacher's qualifications should circumstances occur to render such a course desirable.

The details of the arrangements by which schools and pupils may obtain recognition under the regulations of the Intermediate Education Board for proficiency in Experimental Science, Drawing, and Domestic Economy, as well as the conditions required for a pass in these subjects, are published in the Rules of that Board.

I am,

Sir, or Madam,

Your obedient Servant,

T. P. GILL,

Secretary.

II.

REGULATIONS FOR THE ADMINISTRATION AND DISTRIBUTION OF GRANTS FOR EXPERIMENTAL SCIENCE, DRAWING MANUAL INSTRUCTION, AND DOMESTIC ECONOMY IN DAY SECONDARY SCHOOLS IN IRELAND.

I. SUBJECTS.

1. **EXPERIMENTAL SCIENCE** shall mean such a system of instruction in Physical and Natural Science as will involve the greater part of the work being done by the pupils themselves in an approved laboratory.

2. **DRAWING** shall mean a system of instruction in Free and Mechanical Drawing, Design and Modelling.

3. **MANUAL INSTRUCTION** shall include instruction in the use of tools employed in Wood or Metal-working, and drawing in connection therewith.

4. **DOMESTIC ECONOMY** shall include instruction in Cookery and Home-sewing, and may include Laundry-work or any other form of practical instruction in household management of which the Department may approve.

II. COURSES OF INSTRUCTION.

5. The Courses of Instruction include :—

- (a) A PRELIMINARY (TWO YEAR) COURSE, which is obligatory on all pupils and on all schools claiming grants under these regulations.
- (b) SPECIAL COURSES, and
- (c) AUXILIARY COURSES.

6. THE PRELIMINARY (TWO YEAR) COURSE may vary according to the character of the school; but it shall include Experimental Science and Drawing. Not less than three hours per week shall be devoted to Experimental Science, and not less than one hour per week to Drawing.

In schools claiming grants for more than six hours' instruction in the Preliminary Course in any week, Manual Instruction or Domestic Economy must form part of the Preliminary Course; and, in such cases, at least one hour and a-half per week must be devoted to instruction in one of those subjects.*

In Schools also which do not provide instruction in one of the Special Courses, or whose Special Course has not been recognised by the Department for attendance grants, Manual Instruction or Domestic Economy, with Experimental Science and Drawing, shall constitute the Preliminary Course; and in order that the Preliminary Course in such schools may be recognised, the time-table must show that at least six hours' instruction per week is devoted to instruction in those three subjects.

7. The following are the SPECIAL COURSES. Grants shall not be payable on any one pupil in respect of more than three of these Courses :—

- (1) Physics: Third Year—General Physics, Heat, and (optional) Electricity and Magnetism; fourth year—(a) Wave Motion, Sound and Light and Radiant Heat, or (b) Electricity and Magnetism. (Either or both fourth year syllabuses may be taken. In the latter case grants would be payable on any one pupil in respect of only one other course.)
- (2) Chemistry: Third year—Inorganic Chemistry; fourth year—Inorganic Chemistry, with some Elementary Organic Chemistry.
- (3) Mechanics: Third year syllabus; fourth year syllabus.
- (4) Botany: Third year syllabus; fourth year syllabus.
- (5) Physiology and Hygiene: Third year syllabus; fourth year syllabus.
- (6) Physical and Commercial Geography: Third year syllabus; fourth year syllabus.
- (7) Domestic Economy (Special Course): Third year syllabus; fourth year syllabus.
- (8) Drawing: Third year syllabus; fourth year syllabus.

Managers desiring to have the Special Courses of their schools recognised will be required to show that a fair proportion of the pupils who have worked through the Preliminary Course are in attendance at the Special Courses; that not less than three hours per week are devoted to instruction in each Special Course; and that at least one-third of the time is assigned to theoretical instruction.

Not more than six hours per week may be considered when computing the total number of hours of attendance at any one Special Course.*

8. THE AUXILIARY COURSES include Manual Instruction and Domestic Economy, which may be taken in any year, and may be taken in addition to the three Special Courses permitted under the foregoing paragraph. Domestic Economy may not be taken as a Special Course and also as an Auxiliary Course by the same pupil in the same year.

9. The subjects of the Preliminary, Special and Auxiliary Courses shall be followed in the order prescribed in the Department's published Sylla-

* Attendances at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table.

buses, and pupils may not be admitted to any course who have not worked satisfactorily through the preceding, or equivalent courses. Students, however, who have worked through the Third Year Syllabus of Physics may proceed directly to the Fourth Year Syllabus of Mechanics, and those who have worked through the Third Year Syllabus of Mechanics may proceed directly to the Fourth Year Syllabus (Course B) of Physics.

III. GRANTS.

10. Grants in respect of courses of instruction in Experimental Science, Drawing, Manual Instruction, and Domestic Economy, may be made in accordance with the following regulations, to Day Secondary Schools in which the Department are satisfied that sufficient provision is made for the instruction of the pupils in the other main branches of a general education :—

11. Grants shall be payable in respect of attendances made by those students only who are over twelve and under eighteen years of age on the 1st day of June in the calendar year in which the course is entered upon, and who have completed an education which would entitle them to be placed in the Sixth Class of a school under the Board of National Education in Ireland.

12. Grants shall be payable in respect of attendances made by the pupils of those schools only which have been approved by the Department.

13. Grants on the attendance of duly qualified pupils will be made for each hour of instruction per week throughout the school year, according to the following scale :—

EXPERIMENTAL SCIENCE.—10s. for the first year of the course ; 12s. 6d. for the second year of the course ; 15s. for the third year of the course ; and 20s. for the fourth year of the course.

DOMESTIC ECONOMY (as a Special Course).—8s. for the third or fourth year of the course.

DRAWING.—5s. for the first year of the course ; 6s. for the second year of the course ; 7s. for the third or fourth year of the course.

MANUAL INSTRUCTION AND DOMESTIC ECONOMY (Auxiliary Courses).—6s. for the first year of the course ; 7s. for the second year of the course ; 8s. for the third or fourth year of the course.

14. The numbers on which grants for each subject are to be calculated, at the foregoing rates, shall be determined by adding together the total number of hours of attendance made by all the pupils in that subject (at the approved time-table hours), and dividing by forty, the normal school year being regarded as of forty weeks.

15. The syllabuses of instruction, "first year," "second year," etc., correspond with the "first year," "second year," etc., rates of payment.

16. Grants may be paid in respect of the attendances of any one pupil for not more than two years in any Syllabus. Payments will not be made in respect of any one pupil for more than five years in all. It is not obligatory that the claims should be made in consecutive academic years.

17. The grant to be made in respect of any subject of any year in accordance with the foregoing regulations, may, in exceptional cases, be increased by one-tenth when the Inspector of the Department is of opinion that the work is of conspicuous merit. It may also be reduced by one or more tenths for defects of equipment, or of organisation, or of instruction, or for any other cause which may tend to lessen the efficiency of the work done.

IV. CONDITIONS OF GRANTS.

18. The courses of instruction should begin in August or September of any year and must be *continuous* throughout the school year. The hours per week devoted to the course must be fairly distributed throughout the week : in exceptional circumstances, where *previous* application has been made, the Department may sanction another arrangement. Deviations from the approved time-table, unless *previously* sanctioned, will be regarded as a serious irregularity.

19. Claims for attendance grants may be preferred on behalf of those students only who have punctually and regularly attended instruction in all the obligatory subjects of the Preliminary, or of a Special, course. Grants shall only be payable in respect of the attendance of students at Auxiliary Courses when such attendance has been regular and punctual.

20. Claims for attendance grants may be preferred on behalf of those students only who have been registered as in attendance at instruction in each of the subjects of the course on or before the *1st day of November* in any academic year.

21. Grants shall not be payable in respect of the attendances of pupils of any school which, after working for one academic year in accordance with the Department's regulations, has not the two years' Preliminary Course in operation.

22. Grants shall not be payable in respect of attendances at Manual Instruction or Domestic Economy (Auxiliary Courses) in any year, except in the case of pupils who have attended instruction in the Preliminary Course of Experimental Science and Drawing or in one of the subjects of a Special Course, in that year, in accordance with the Regulations.

[*Regulation 23 cancelled.*]

24. Grants will be made only upon a satisfactory report by an Inspector of the Department. The Inspector will satisfy himself not only that the attendances on which the claim is based have actually been made, but also that the instruction is of a class superior to that given in Elementary Schools.

25. Grants shall not be payable in respect of pupils who are reported by the Department's Inspectors as unfit to attend the Courses in which they have been receiving instruction.

26. Pupils on the roll of a National School are not eligible for attendance grants.

V. REGISTRATION.

27. Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes (Form S. 44); attendances not registered in the manner indicated on the official registers, or registered before the receipt of Form S. 44, will be disregarded. A class may not be said to have begun until attendances are so registered.

VI. LABORATORIES.

28. Grants will not be made for instruction unless due provision is made for experimental work in Science, on the part of the pupils, in properly equipped and approved laboratories.

VII. DURATION OF LESSONS.

29. Practical Instruction in Science, Manual Instruction and Domestic Economy, must be given in lessons of at least eighty minutes' duration.

30. Lessons of less than forty minutes' duration will not be considered in computing the "total number of hours of attendance."

31. The minimum time per week recognised for grants on behalf of attendance at Manual Instruction or Domestic Economy is one hour and a half.

32. The time table of the school must be arranged so as to leave sufficient time to the teacher for preparation of laboratory work.

VIII. SIZE OF CLASSES.

33. Not more than forty pupils shall be taken at a time by one teacher for Theoretical Instruction, nor more than twenty for Practical Instruction in any one subject, unless an assistant recognised by the Department is provided. In that case the number for Practical Instruction may be increased to thirty. Instruction in Drawing may, for this purpose, be regarded as theoretical instruction.

34. Where classes for practical instruction are small, concurrent instruction in two Syllabuses may be exceptionally allowed, but the approval of the Department must be obtained in each case.

35. Concurrent instruction in the first and second year syllabuses of the Preliminary Course in Drawing will be allowed under one teacher where the number of pupils under instruction does not exceed thirty.

IX. GENERAL CONDITIONS.

36. The qualifications of the teachers and assistant teachers, and the time-table of the school, must be approved by the Department.

37. It shall be a condition of grants being made, that, except in the case of teachers who give their services gratuitously, a fixed salary shall be paid to the teachers of the classes, either in respect of these classes or of their work in the school as a whole; that a reasonable sum of money shall be provided for the upkeep of the premises; and that the grants obtained shall be paid into the school account and be used for improving the efficiency of the school.

38. That portion of the Income of a school which is derived from grants in accordance with these regulations must be applied to such purposes as shall be approved by the Department. If at any time it appears that the application of the income is unsatisfactory, the assistance of the Department may be withdrawn. An account of the receipts and expenditure of each school in respect of these grants must be furnished if required by the Department.

39. The Department reserve, under these regulations, the right to withhold grants from any school conducted for private profit in which the fees are, in the Department's opinion, excessive, or which is situated in a locality already sufficiently supplied with public institutions.

40. The decision of the Department in regard to all questions arising in connection with the payment of grants under this programme must be regarded as final.

PROGRAMME FOR TECHNICAL SCHOOLS AND SCIENCE AND ART SCHOOLS AND CLASSES.

I.

EXPLANATORY CIRCULAR.

DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN,

May, 1912.

SIR,

The Regulations for Technical Schools and Science and Art Schools and Classes which were in operation during the Session 1911-12 will continue in force, with certain slight alterations, during the Session 1912-13. The principal changes are shown in *italics*.

An outline syllabus of Domestic Economy of the Introductory Course has been added to Appendix B.

Teachers attending the ordinary classes conducted in Technical Schools under the terms of Section II. (a) of this Programme will not be required to adopt courses of study as provided for in paragraph 18, and will be at liberty to attend instruction in any subject or subjects a knowledge of which would be of advantage to them in their work. Grants in such cases will not be paid, in any one year, for more than three subjects in respect of any one teacher, and the payment for any subject will be at the rate appropriate to the year of syllabus followed.

Attention is directed to the terms of Section II. (a) 9, under which it is necessary for the Managers of Schools to submit, by the 7th June, full

particulars of the courses of instruction to be adopted. The main subjects of each course should be indicated.

In order to facilitate the work of inspection, and the checking of the particulars as to previous training, etc., necessary in the case of all students in respect of whom it is proposed to claim grants under Sections II. (a) and III., the Department will require, by the 5th December in each year, a complete list of such students showing the courses of study followed by each and their qualifications for admission to the courses.

The Department have found that the conditions in regard to the keeping of admission registers have not been generally complied with, and they desire it to be understood that Managers of all Schools and Classes are expected to keep a systematic record of all students. A draft of an entrance form designed to meet the requirements of Section VII., 72, has been printed as Appendix C.

I am, Sir,

Your obedient Servant,

T. P. GILL,

Secretary.

II.

PREFATORY NOTE.

The following Regulations are designed to provide supplementary aid towards the instruction given in Technical Schools and Classes. They also apply to certain institutions, other than Day Secondary Schools, which, prior to the issue of these Regulations had received aid under the conditions of the Science and Art Directory of the Board of Education. The grants payable under these Regulations are from monies voted annually by Parliament, and supplement the aid provided from the Department's Endowment Fund and local rates.

It is recognised that the funds for Technical Instruction derived from the rates and from the Department's Endowment are inadequate to meet the demands upon them owing to the rapid development of the Department's work in Technical Schools. The grant towards schemes of Technical Instruction from the Department's Endowment is limited by the amount of that Endowment. The grants under these Regulations vary in accordance with the amount and value of the educational work done. The Regulations are intended to encourage the efficient organisation of courses of instruction and to extend facilities for providing efficient teaching in the subjects of the Programme.

The Schools and Classes working under Part II. (a) of this Programme are mainly, though not exclusively, Evening Schools. It may be useful to indicate the position which teaching in evening classes occupies in relation to other branches of education. It is clear that instruction in evening classes cannot form a substitute for the more general and systematic education given in Day Schools, whether Primary, Secondary, or Technical. The work of such evening schools and classes constitutes a specialised form of education, intended to fit those receiving it for industrial or commercial pursuits, or to render those already engaged in such pursuits more efficient in their work. Instructions of this nature in evening schools has obvious drawbacks. It possesses, however, certain well marked advantages. Attendance at such schools is purely voluntary. Those attending are for the most part engaged or about to be engaged in some form of industry—they have commenced the serious work of life—and are meeting problems and difficulties which the Evening Technical School can help them to solve. They perceive that the higher branches of their calling may be reached only by increased technical skill and

knowledge. This being the case, the attitude of evening students to instruction is usually most favourable; but progress is hindered by several circumstances: the previous preparation of students joining evening Technical Schools is in many cases not such as to fit them for the specialised form of instruction which it is the special function of such schools to impart. An attempt is made in these Regulations to remedy this defect. Before a student can take full advantage of a specialised course of instruction in any branch of Science or Technology he should at least be able to express himself clearly, both orally and by means of writing and drawing; he should be able to make such elementary calculations as are required in all industries, and he should know something at least, and that something really and practically, of the fundamental principles of Science underlying all industrial work. Without this preparation a student cannot hope to profit by a specialised course. He will be continually handicapped and disheartened by the difficulties, and will tend to retard other members of the class who may be better prepared. When these conditions are not satisfied the young student should be given an opportunity to comply with them, and to this end should enter the Introductory Course.

A certain standard of elementary education is obviously necessary for such an Introductory Course as that set out in the Regulations. It will be necessary that schools should carefully refrain from registering, in the Introductory Course, students who have not attained this standard. If such students were admitted the bad effects would appear in the work of the specialised courses. The work of the Introductory Course is intended to provide the necessary preliminary instruction for those not already qualified, and suggested Syllabuses of English, Mathematics, and Domestic Economy suitable to the Courses are contained in Appendix B.

A second difficulty is the shortness of time available for instruction in Evening Classes. For students engaged in arduous work during the day the amount of time devoted to evening technical school work must be severely limited. Speaking generally, not more than two evening attendances a week can be expected, for homework is essential if full advantage is to be derived from the work in class. The hours of school study thus limited become precious, and the organisation of the school and the efforts of the teachers should be earnestly directed to the most thorough utilisation of these hours, and to this end every lesson should be carefully prepared. It will, moreover, be obvious that, under such circumstances, regular attendance becomes a matter of the highest importance. The Department mark their sense of the importance of this by the "Increment Grant" under which largely increased grants are paid for continued attendance over twenty hours, up to a limit of 120 hours.

Students who have satisfactorily passed through the Introductory Course, which may occupy one, or, at most, two years, or who have in some other manner reached a satisfactory standard of education, may be registered for attendance in a course of instruction designed to extend over three or four years. A wide freedom is allowed under the Programme in order to permit schools to frame courses in accordance with the needs of the locality and its industries. It thus becomes necessary on the part of Committees of Schools and their Principals to make themselves familiar with the local industrial conditions and needs, and to frame courses of instruction in accordance with those conditions. It seems necessary to remark that such courses should be carefully considered and drawn up some time in advance of the opening of a new session in order that the Department's approval may be obtained. The Department may refuse where this has not been done to make any payments in respect of such courses.

It is necessary to point out that it is not enough, in drafting a course of instruction in any branch of technical knowledge, to indicate a number of subjects, some of which may be taken at the option of the student. What is wanted is that a course of work should be designed and Syllabuses should be framed by the teacher to meet the needs of those for whom the

course is intended. This may, and no doubt will, somewhat restrict the number of those who can be claimed upon as following the course, but it will greatly increase its value to the technical student. If the Syllabuses be carefully drawn up no course need consist of more than two or three subjects, and optional subjects would become the exception rather than the rule. Instead of offering a number of *Subjects* a school should offer a number of *Courses*, and no student should be allowed to omit subjects of fundamental importance. Where, however, a student on entering a school shows a competent knowledge of the earlier stages of a Course of Study he may be allowed to join the Second or Third Year Course.

The Department will expect that Courses submitted for approval shall be accompanied by Syllabuses drawn up with a view to local needs.

They will accept, where these are appropriate, the Syllabuses of the Board of Education, the City and Guilds of London Institute, the Royal Society of Arts, etc., but each subject in each year of a course of instruction should be represented by a definite Syllabus of work graded to suit the successive years of the course. The Syllabuses in each subject should be so drawn up as to enable them to be covered in one session. When this has been carefully done the promotion of students will proceed automatically from year to year, and only in exceptional cases should it be necessary for a student to "repeat" the work of a year. Payments will not be made in respect of attendances at subjects lying outside the courses approved by the Department.

It will be obvious that the greatest importance attaches to the drawing up and organisation of these courses of instruction. In the first place it may be remarked that schools will be well advised to severely restrict the number of courses attempted.

While there are, no doubt, cases in which an exception may wisely be made, as a general rule students should only follow courses designed for the occupation they follow or intend to follow. The grant will vary according to the efficiency of the work of a school, and this in turn will in a large measure depend upon the manner in which the school is organised to meet local needs and to provide a suitable training for local industries. Every school will be expected to maintain a careful and systematic record of all its students in which particulars of the previous educational experience of each student, his age and occupation, the course, and subjects taken in successive years of attendance, are readily available, and, where possible, should also contain some information about the career of students subsequent to their leaving the School.

It will be observed that encouragement is afforded by the scheme for efforts to secure regular attendance, and attendance for several successive years. The increased grants for instruction in successive years also afford facilities for the employment of more highly trained teachers than would otherwise be possible, and the Department will expect that for such advanced instruction teachers of ability and experience will be employed. In courses in Applied Science, for example, efforts should be made to secure teachers having experience in the particular industry to which the course applies.

While the maintenance of courses of instruction such as have been indicated above should be aimed at in Technical Schools, there are many schools and classes where students cannot as yet be got to take courses. In rural districts especially, much excellent work is done by means of classes in Domestic Economy and Manual Work conducted by Itinerant Instructors. The Department desire to aid such classes as well as small permanent centres where the instruction is efficient. They are prepared, therefore, to make grants under Section II. (b) at a lower rate than those appropriate to courses of instruction as set out in Section II. (a). They desire, accordingly to draw the attention of Committees to the regulations for payment on single subjects of instruction set out under Section II. (b) of the Regulations.

III.

REGULATIONS FOR THE ADMINISTRATION AND DISTRIBUTION OF GRANTS TO SCHOOLS OTHER THAN DAY SECONDARY SCHOOLS.

I.—*Conditions under which Schools and Classes may be recognised for Grants.*

1. The school or class must be under the superintendence of a Committee appointed under Section 14 of the Agriculture and Technical Instruction (Ireland) Act, 1899, or other responsible body of managers, recognised by the Department, to whom grants will be paid.

2. Grants under these regulations will only be made in respect of schools or classes in Counties, County Boroughs or Urban Districts in which a rate for technical instruction is raised.

3. The premises in which classes are conducted, the accommodation and equipment, and the programme of instruction, must be approved by the Department.

4. The qualifications of teachers and assistant teachers and the timetable must be approved by the Department.

5. The managers of a school or class must make accurate returns of such particulars as are required by the Department and within the specified times.

6. The Department may from time to time require from the local Committees a report as to the provision made within their district, either by themselves or other managers, for instruction in the subjects of this programme, regard being had to the industries of the district, and the occupation of the inhabitants, and may, upon consideration of this report, recognise or refuse to recognise any further classes which may be proposed.

7. The schools and classes shall be at all times open to the Department's inspectors, who will, from time to time, visit with or without notice, and report on the condition and suitability of the school buildings or classrooms; the character and quality of the instruction, and its suitability to the needs of the locality; the adequacy of the teaching staff for the number of students under instruction, the progress of the students, which they may ascertain in such a manner as they may consider necessary; the method of registration; and generally as to the organisation of the school work, and the carrying out of the scheme of instruction in accordance with the Department's Regulations.

II. (a)—*Technical Schools.*

8. The authorities of each school working under this section must provide a series of suggested courses of instruction, which have grown out of a study of local industrial conditions. These courses of instruction should be made up of allied subjects, should be designed to extend over three or four years, and should be progressive in character. In the case of small schools, however, two year courses may be accepted. In addition to these in schools admitting students who possess only the minimum requirements for admission to a Technical School, an Introductory Course should be provided.

9. The courses proposed by the authorities of each school must be submitted to the Department by the 7th June preceding the Session, and must be accompanied by Syllabuses (in duplicate) in cases where these have not already been approved. These proposals will require the written approval of the Department. A draft of a convenient form in which to draw up the courses is set out in Appendix E.

10. The instruction should be given in evening classes, but where the Department consider that local circumstances justify the establishment of day classes, such classes may be formed.

11. An evening class is one in which instruction begins at or after 4 p.m. throughout the week, or at or after 1 p.m. on Saturdays.

12. A day class is one in which instruction begins before 4 p.m. throughout the week, or before 1 p.m. on Saturdays.

(i.)—REGULATIONS APPLYING ESPECIALLY TO THE INTRODUCTORY COURSE.

13. Introductory course classes should be of such a nature as to fit students to take up a specialised course of technical instruction. *These classes must be distinct from those organised under (ii.) below, and must be taught separately.*

14. The subjects of instruction in respect of which payments are made under this division are :—

- (a) English.
- (b) Mathematics.
- (c) One or more of the following :—

Experimental Science, Drawing, Manual Work in Wood or Metal, Domestic Economy.

15. Students on whom grants are claimed must have received such an education as would entitle them to be placed in the sixth class of a school under the National Board.

16. All students under instruction in the Introductory Course must attend instruction in each of the sections (a) (b) and (c) of paragraph 14 above.

17. Students registered in the Introductory Course will not be eligible for payments in a Specialised Course in the same session.

(ii.)—REGULATIONS APPLYING ESPECIALLY TO THE SPECIALISED COURSES.

18. A specialised course of instruction for any student on whom payment may be claimed shall consist of a scheme of study in two or more subjects of a course approved by the Department, and extending over three or more years.

In the first year of specialisation students must take up at least two and not more than three subjects, and in subsequent years not more than three subjects.

The Department will require, as a rule, that one main subject will be continued throughout each student's course of study. The instruction received in this main subject, as well as in other subjects approved as part of the course, will be eligible for grants at the rates appropriate to the year of specialisation of the student.

In courses for women, where a student adopts a course of study in which the main subject is a subject other than in Domestic Science, and which complies with the minimum requirements as to the number of subjects to be taken, the Department will allow grants in respect of instruction in Domestic Science, provided that not more than three subjects in all are taken in any year.

19. Students registered in this section must—

- (a) have satisfactorily followed the Introductory Course, or
- (b) have passed in the Junior Grade Examination of the Intermediate Education Board, or
- (c) be certified by the Principal or responsible teacher to have reached an equivalent satisfactory standard of education.

20. In the case of students registered under 19 (c) the following particulars must be submitted in writing to the Department's Inspector for his approval :—

- (i.) any examinations passed which are regarded as equivalent to (b), or
- (ii.) the marks obtained at entrance examinations held in the Technical School. (The worked papers should be retained on the school premises) ; or,
- (iii.) any special reasons for admitting students to specialised courses.

21. For the purposes of grants the subjects which may be included in specialised courses of study, and on which payment may be made, are grouped as follows, but courses of study may be made up of subjects taken from different groups.

Group A.—Commercial Subjects (Section A.).

Group B.—(1) Commercial Subjects (Section B.).

(2) Languages.

(3) Mathematics.

Group C.—Science (Pure and Applied).

Group D.—(1) Handicraft.

(2) Domestic Science.

Group E.—Art Subjects.

Group A.—*Commercial Subjects (Section A.)*

Commercial subjects which involve mostly mechanical operations, such as shorthand, book-keeping, and office routine, including copying, indexing, filing, correspondence, typewriting, and the mechanical operations concerned with postage, telegraph and banking.

Group B.—(1) *Commercial Subjects (Section B.)*

This group includes the study of subjects which require wider general knowledge and more intensive study than those in Group A., such as economics of industry and commerce, commercial law, accountancy, banking and currency, insurance, statistics, railway administration, and economic and commercial history and geography.

(2) *Languages.*

The teaching of languages in the evening is partly a subject of general culture; is required partly for commercial correspondence; and partly for those who have to deal with the mechanical operations of seeing books and other literature through the press. The group may include Irish, French, German, Spanish, Italian, or any other language (including history and literature) which a committee can show to be required by the circumstances of a locality.

(3) *Mathematics.*

Mathematical subjects, including the treatment of the subject in a practical way; such treatment, our example, as is usually given under the subject of mensuration or of practical plane and solid geometry.

Group C.—*Science (Pure and Applied).*

Under pure science will be included such subjects as mechanics, physics, chemistry, biology, botany, zoology, physiology.

Under applied science would be included naval architecture, navigation, nautical astronomy, building construction, machine construction and other subjects involving systematic instruction in the underlying scientific principles, and which would be classified under such headings as :—

- (1) Building industries.
- (2) Metal industries.
- (3) Textile industries.
- (4) Printing and process industries.
- (5) Furniture industries.
- (6) Leather industries.
- (7) Woodworking industries.
- (8) Carriage Building industries.
- (9) Electrical industries.
- (10) Chemical industries.
- (11) Agricultural industries.

At least half the instruction in subjects included in this group should be practical, and must be given under approved conditions of accommodation and equipment.

The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

Group D.—*Handicraft and Domestic Science.*

- (1) Handicraft—manual instruction in wood and metal, wood-carving.
 (2) Household subjects, including cookery and hygiene, housewifery, laundry-work, dressmaking, millinery, needlework.

Group E.—*Art Subjects.*

Drawing (free and mechanical), design, painting, architecture, modelling and applied art, such as black and white illustration, goldsmiths', silver-smiths', and jewellers' work, stained glass work, mosaic, enamelling, and any other subject of applied art which a committee can show to be required by the circumstances of their locality.

The first year of a student's course in Art must include instruction in the two subjects—free and mechanical drawing.

(iii.)—*RATES OF GRANTS FOR EVENING CLASSES.*

22. Grants will be made upon the total number of hours of attendance of fully qualified pupils, at the following rates per attendance-hour:—

Introductory Course, 2d.

Specialised Courses—

Year of Course.	Group A. Commercial Subjects. (Section A.)	Group B. (1) Commercial Subjects (Section B.), (2) Languages, (3) Mathematics.	Group D. Handicraft and Domestic Science.	Group C. Science (Pure and Applied).	Group E. Art Subjects.
First Year	d. 2	d. 4	d. 4	d. 6	d. 4
Second Year	3	6	5	9	6
Third Year	4	9	6	12	9
Fourth and subsequent years	5	15	6	21	12

23. The rates of grants payable in respect of each group may in any school, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

24. An increment for continued attendance at instruction in the case of individual students will be paid on the total attendance-hours at all subjects of an approved course, in the introductory or in the specialised courses.

Rate of Increment for Continued Attendance.

For each hour from 21 to 40 hours, 1d. per hour.

"	"	41 to 60	"	2d.	"
"	"	61 to 80	"	3d.	"
"	"	81 to 100	"	4d.	"
"	"	101 to 120	"	5d.	"

No increment will be paid on attendance-hours exceeding 120.

(A complete statement of the increment grants payable on this scale is set out in Appendix F.)

(iv.)—*RATE OF GRANTS FOR DAY CLASSES.*

25. Grants to Day Classes will be made at half the above rates, and no increment on account of instruction given in these classes will be payable.

Not more than 400 hours' attendance in all in any one session may be claimed upon in respect of any student attending a day class.

(v.)—REGULATIONS FOR PAYMENT OF GRANTS.

(See also General Regulations, page [141].)

26. Each student must be registered as in attendance at instruction in his course on or before the 1st December in each session.

27. The total attendances of any student at any approved course of study must be fairly distributed over the subjects of the course.

28. A year's work will involve at least forty hours' instruction in the subject matter of any *course* of study, and students who have not satisfied this requirement may not be registered for attendance grants in a higher course.

29. Students will be eligible for grants in the same Syllabus in a subject for not more than two School Sessions. Grants will not, however, be paid in respect of a second year's attendance in the same Syllabus should the student's attendance be claimed on generally at the rates appropriate to a higher year of specialisation.

30. Students will be eligible for grants for not more than two School Sessions at the rates for the introductory course, or for any one year of specialisation.

31. Students will, unless in exceptional circumstances, be required to pursue the course of study which they may adopt upon entering the school. In the case of students who may, with the approval of the Department, change their course, payments will be made at first year rates only in respect of the first year of specialisation in the new course, and a further change will not be approved until they have completed a satisfactory amount of instruction in that course.

32. The attendance of teachers at day classes may be paid upon at evening rates.

II. (b)—*Technical Classes.*

33. Grants at a lower rate than those set out in Section II. (a.) will be paid upon the attendance of pupils in any approved subject of instruction under the following conditions:—

34. The rates of payment will be:—

- | | |
|---|---------------|
| (1) For Literary or Commercial Subjects, . . . | 2d. per hour. |
| (2) For Art, Handicraft and Domestic Science
Subjects, . . . | 3d. per hour. |
| (3) For Science (Pure and Applied) Subjects, . . . | 4d. per hour. |

35. Grants under this section will not be paid in respect of more than one subject for each student.

36. Domestic Science and Agricultural Science, for the purpose of this regulation, will each be regarded as one subject.

37. Grants will not be paid under this Section on account of students registered under Section II. (a.).

38. The grant on account of any Class under this Section will, as a rule, be the normal grant calculated upon the basis set out above, but the grant for any subject may, on account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department may decide.

39. The arrangements regulating the admission of students must be such as to exclude from a class any student who from want of sufficient preliminary training, or other cause, is not qualified to take advantage of the instruction given in it. The grant may be withheld on account of any students whom the Inspector reports to be thus unqualified.

40. *In schools where, in the opinion of the Department, on consideration of the reports of the Inspector, the circumstances are such as to permit of the organization of classes exclusively for students registered under this section, they will require that this shall be done.*

41. The practical work of the students must not include a continued repetition of manipulative processes of which they have acquired a knowledge.

III.—*Teachers' Classes.*

42. Where special classes or courses are established at a Technical School or Central Institution (other than a Training College) for the instruction of teachers of Primary or Secondary Schools in the subjects of this programme, in accordance with a scheme approved by the Department, grants may be paid at the rate prescribed for the third year of specialisation under Section II., 22, of this programme.

43. Payments may be made in respect of any teacher for any subject for not more than three years, and will be at the same rate for each year.

44. The amount of grant payable under these rates may in any school, upon grounds of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

45. No increment grants will be payable under this Section.

46. The instructors must be recognised by the Department as qualified for this special work.

47. Proposals for the conduct of classes under this Section must be specially submitted for approval, and should include particulars as to the number and status of the teachers for whom the class or course is organised, the proposed syllabus of instruction, and the special qualifications of the teacher.

48. Classes working under this Section will be required to submit to such examination as the Department may decide.

49. Grants will not be paid in respect of the attendance at these classes of students other than teachers actually engaged in Primary and Secondary Schools. Monitors and Pupil Teachers in National Schools, are not regarded as "teachers" for this purpose. ¶

IV.—*Day Schools for Apprentices and others engaged in Business.*

50. Day technical or commercial schools or classes, which are conducted by properly constituted managers, either in conjunction with works, business houses, or technical schools, with a view to improving the conditions of local industries and commerce, and to the further training of sub-managers, foremen, tradesmen or apprentices, may be admitted for grants under this section.

51. Such schools or classes must be open on one or more days of the week, not later than six o'clock in the evening, or than 1 p.m. on Saturdays.

52. Grants not exceeding three-fourths of the certified annual expenditure for the conduct of such schools or classes may be made by the Department in respect of students for whom an employer's certificate can be produced, showing that the students have been engaged during the session in a business, trade, or industry, or that they are indentured or properly engaged as apprentices to a firm or to an individual.

53. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers.

54. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

55. The accommodation provided, the courses of instruction, the syllabuses of the subjects taught, the qualifications of the teachers, the timetable of instruction and the estimate of expenditure, must be approved by the Department.

56. The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

57. The amount of grants payable in respect of any school may, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department in consideration of their Inspector's report, may determine.

V.—*Schools of Art.*

58. Schools of Art, which provide for students, the majority of whom are industrial, courses extending continuously over two or three years, according to a scheme approved by the Department, may be paid grants not exceeding three-fourths of the actual annual expenditure incurred in the conduct of such courses.

59. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers. An estimate of the expenditure must be submitted for the approval of the Department before the commencement of the session.

60. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

61. No grants will be payable to Schools of Art adopting this section of the regulations under the methods of payment set out in sections II. and III.

62. Recognition may be withheld or withdrawn from any School of Art in which, in the opinion of the Department, the efficiency of the instruction and the number of students in attendance do not justify the expenditure involved.

63. For the purposes of this section a School of Art must satisfy the following conditions :—

(a) The rooms and equipment must be approved by the Department, and must be wholly devoted to elementary and advanced instruction in art.

(b) Provision must be made for drawing from life and modelling, and for instruction in ornamental and decorative art.

(c) The Principal Teacher must hold an art master's certificate or an equivalent qualification.

(d) Assistant Teachers must possess qualifications recognised by the Department (*vide* Appendix A.).

(e) Both day and evening classes must be held. The evening class must meet under the instruction of the Principal Teacher for two hours for at least three evenings per week, during forty weeks of the year, and the day class for the same period for at least three hours per day on two days of the week.

64. The amount of grants payable in respect of any school may, upon account of conspicuous merit, be increased by one tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

VI.—*Training Colleges.*

65. Grants may be made for the instruction of students in training colleges in mathematics, experimental science, and drawing.

66. The rates per attendance-hour at which grants will be paid are as follows :—

	First Year. d.	Second Year. d.
Mathematics,	2	3
Experimental Science	3	4½
Drawing	2	3

67. No increments will be payable on such attendances.

68. Not more than 400 hours in all, nor more than 200 in any one of these subjects, may be allowed for purposes of grants in the case of any one student.

69. Grants in respect of any student may be claimed once only in the first year course, and once only in the second year course.

70. The rates per attendance hour may, upon account of exceptional merit, be increased by one tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, on consideration of their Inspector's report, may determine.

71. Syllabuses of the courses of instruction must be submitted at the beginning of the session for the Department's approval.

VII.—General Regulations.

(Applicable to all Schools and Classes conducted under this Programme.)

72. Each school or class working under these regulations will be required to keep an admission register, which shall show for each student :—

- (1) full name and date of birth.
- (2) business, trade, or occupation,
- (3) School or college at which the student received his general education, and standard of education attained, with particulars of highest examinations passed.
- (4) qualifications to enter a technical school, or class.
- (5) classes attended each session in the school.

NOTE.—Suitably drafted admission forms may be made to fulfil the Department's requirements for an admission register. In larger schools it will be found more convenient to adopt the card-index system, the particulars required being transferred from the student's admission forms.

73. The registration of students must be conducted in accordance with the regulations set out on the official registers.

Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes; attendances not registered in the manner indicated on the official registers for the session will be disregarded. A class may not be said to have begun until attendances are so registered.

74. Lessons must be of one, one-and-a-half, two, two-and-a-half or three hours' duration. Laboratory or workshop practice, or practical instruction in Cookery, must be given in lessons of not less than one-and-a-half hours' duration.

75. Not more than forty students may be taken at a time by one teacher for theoretical instruction, nor more than twenty for practical instruction in any subject, unless an assistant, recognised by the Department, is provided, in which case the number may be increased to thirty. The special circumstances of large institutions will be exceptionally considered by the Department on written application.

76. Each class in any subject must receive at least twenty hours' instruction in the session.

77. Grants will not be paid for less than twenty hours' attendance in respect of any one student. In cases in which it is permissible or necessary for a student to take more than one subject, grants will not be paid on account of any subject in which less than ten hours' attendance is made.

78. Grants will not be paid on account of any attendances lost, or on account of any period during which the school is closed for epidemic illness, but where the Department are satisfied that any failure to comply with these regulations has been due to epidemic illness or other unavoidable cause, they may relax the regulations as far as may be necessary to meet the case.

79. If any of the conditions on which the grant is awarded are not fulfilled, the Department may withhold the grant, or, if they think fit, may pay the grant with or without deductions, warning the managers that a grant will not again be paid under similar circumstances.

80. Students may not be registered for grants under these regulations who are under fourteen years of age, and no student can be registered for grants under these regulations in respect of whom any grant is paid by the Department under any other regulations.

81. Scholars on the roll of a school (day or evening) under the Board of National Education may not be registered for grants under these regulations.

VIII.—*Qualifications of Teachers.*

82. The Department do not demand the same high qualifications from teachers in small schools as from teachers in the larger technical institutes, nor will they approve of the larger institutions, especially in the county boroughs, employing teachers who might for economic or other reasons have to be accepted as teachers in small schools. Each application will be dealt with on its merits, bearing in mind the special circumstances of each district, and the finances of the school. Some of the certificates which will be accepted for provisional recognition by the Department are, however, set out in Appendix A.

83. The final appointment of a teacher should not be made until his qualifications have been approved in writing by the Department.

84. A register is kept by the Department containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject to the satisfaction of the Department for at least one session.

IX.—(a) *Local Science and Art Scholarships.*

85. Where County Committees of Technical Instruction have established a system of Scholarships for boys as part of the approved scheme of technical instruction for the county, the Department may make a grant in aid of the Scholarship fund not exceeding half the value of the Scholarships awarded. This grant will not in the case of any county exceed £50 in any one year.

(b) *Local Exhibitions.*

86. Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions, of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art School, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age, they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education.

87. In the case of Exhibitioners whose admission to the Royal College of Science for Ireland, Dublin, or the Metropolitan School of Art, Dublin, has been sanctioned by the Department, the fees for tuition at these Institutions will be remitted. Where the Exhibition is held in a school, under the management of the Technical Instruction Committee by whom the Exhibition is established, the Department will require that the Committee shall remit the fees for tuition. In the case of all Exhibitions held at other approved Institutions, the Department will be prepared to pay half the fees for tuition in an approved course, provided that the Technical Instruction Committee, by whom the Exhibition is established, provide the other half from their funds. The Department's grant in such circumstances will not, however, exceed the sum of £10 in respect of any one exhibition.

88. Successful candidates must devote their whole time during the

period for which the Exhibition is granted to the advancement of their studies. Committees proposing to establish Exhibitions must submit, for the Department's approval, a scheme for the award of Exhibitions.

89. The Department may refuse to aid any Exhibition if there is not a sufficient number of competitors, or if the selected candidate does not, in their opinion, show sufficient merit to justify the award of an Exhibition.

X.—*Certificate of Satisfactory Completion of Course.*

90. A certificate may be issued to any student who has followed in a Technical School a sufficiently satisfactory course, extending over at least two years of specialisation, and an Honours certificate to any student who has followed an approved course extending over at least four years of specialisation. The certificate forms will be prepared and filled in locally, and signed by the chairman of Committee and Principal of the school. The Department will afterwards stamp them to give them authoritative recognition. The names of the subjects of the course in each year, the number of hours' instruction, and the number of years' attendance should be inscribed on the back of the certificate.

91. The Department may, as necessity arises, modify or add to this Programme; but no important changes will be made without due notice.

92. The decision of the Department in all questions arising in connection with the payment of grants under the Programme must be regarded as final.

APPENDIX A.

QUALIFICATIONS OF TEACHERS.

A register has been formed, containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject, to the satisfaction of the Department, for at least one session.

Provisional recognition will, as a rule, be accorded in respect of the following qualifications:—

(1.) The Degree of any University, or the Diploma of an approved Day Technical University College, in respect of subjects taken at the final examination for the Degree or Diploma.

(2.) First Class full Technological Certificates of the City and Guilds of London Institute.

(3.) The Irish Secondary Teachers' Drawing Certificate in respect of elementary instruction in Art subjects, such, for example, as the teaching of Drawing to classes of the Introductory year.

(4.) The Irish Secondary Teachers' Honours' Drawing Certificate in respect of the subjects named on the certificate. In county boroughs, and in the larger technical schools where circumstances appear to demand it, higher qualifications will be looked for.

(5.) The Department's Diploma in respect of Domestic Economy subjects in the case of students trained at the Irish Training School of Domestic Economy.

(6.) Diplomas in respect of Domestic Economy subjects awarded by the Board of Education, by the National Union, or by the late Kildare Street School of Cookery, now the Irish Training School of Domestic Economy.

(7.) Certificates in respect of Manual Instruction issued by the Department at the close of courses of training of Manual Instructors conducted in Dublin.

(8.) The Teachers' Certificates in Manual Training (Woodwork and Metalwork) of the City and Guilds of London Institute, and the Teachers' Higher Certificates (Woodwork and Metalwork) of the Board of Examinations for Educational Handwork.

(9.) Certificates of Class I., Stage III., of the Royal Society of Arts.

(10.) Teachers' Diplomas of the London Chamber of Commerce in respect of commercial subjects and languages named thereon.

(11.) Pitman's Full Teacher's Certificate for Shorthand.

(12.) The Certificate of the National Board, in respect of English and Mathematics of the Introductory year.

First-class Certificates in the Lower Grade (or in Stage II.) of Science subjects of the Board of Education will not alone be recognised as a sufficient qualification to teach the subject named on the certificate.

For recognition as teacher of a modern language, high attainments, and some conversational ability, will be looked for.

Specially qualified persons will always be exceptionally recognised but such recognition will be granted only when the applicant for recognition has satisfied the Department that he is specially qualified. Applications for special recognition should be accompanied by a complete detailed statement of the applicant's course of study and work; and should be supported, as far as possible, by certificates from professors or employers. In order to determine finally whether a teacher has sufficient technical knowledge of the subject which he seeks to teach, the Department may request him to undergo a special examination. Such special examination will, as a rule, be held in Dublin; and the applicant will have to bear his own travelling and personal expenses in connection therewith.

Registration of a teacher's qualification may be suspended (or further provisional recognition refused) upon evidence of insufficient knowledge of a subject for teaching purposes, or of inefficiency as a teacher from whatever cause arising.

EXAMPLES OF SCHEMES OF TECHNICAL INSTRUCTION IN NON-AGRICULTURAL SUBJECTS.

COUNTY CLARE.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

The Scheme, subject to the provisions requiring local contributions from rates (see Finance) is applicable to the Urban Districts of Ennis and Kilmuckridge, and to all the rural districts within the administrative area of the County Council.

Population of the County:—Urban Districts, 9,138; Rural Districts, 94,094; total 103,232.

Valuation of the County:—Urban Districts, 12,884; Rural Districts, 312,443; total, 325,327.

Value of 1d. rate:—Urban Districts, £54; Rural Districts, £1,302; total, £1,356.

The local contributions from rates (Urban and County) will be paid over to the Committee before the 1st October, 1912.

Technical Instruction Committee.

The Committee is a Joint Committee of the Clare County Council and the Urban District Councils of Ennis and Kilmuckridge. It consists of twenty-four members, of whom sixteen are Councillors, and eight added members.

Objects of the Scheme.

The objects of the Scheme are to provide, chiefly by means of itinerant instructors and technical classes for girls, instruction in technological, commercial, industrial, and domestic economy subjects.

The Scheme is set out under the following heads:—

I. Finance.

II. Itinerant Instruction.

- III. Technical Classes for Girls.
 IV. Technical and Apprenticeship Scholarships for Boys.
 V. Scholarships for Girls.
 VI. General Conditions.

I. FINANCE.

A. Estimated Income :

(1) Contribution from the County Council from rates levied over the Rural Districts in the Financial Year ending 31st March, 1913	£250
(2) Contributions from the Urban District Councils of Ennis and Kilrush (the produce of a rate of 1d. in the £ levied in the Financial Year ending 31st March, 1913) ..	45
(3) Contributions from the Department :—	
(a) Annual Contribution	£850
Less amount equal to one half of the grant earned under Section II (b) of the Technical School Programme (see below)	100
	£750
(b) Grants under Section II (b) of the Programme	200
	950
Total	£1,245

B. Estimated Expenditure :

(1) Salary of one Manual Instructor	£135
(2) Salaries of three Domestic Economy Instructresses	285
(3) Salary of Commercial Teacher	150
(4) Travelling Expenses of Teachers	80
(5) Class Expenses, including cost of supplies, rent of rooms, removal of equipment, etc.	210
(6) (a) Six Scholarships for Girls tenable at a recognised Residential School of Domestic Training	£90
(b) Allowance in respect of expert instruction for Scholarship-holders, at £5 per scholar	30
	120
(7) Prizes	20
(8) Technical Classes for Girls (see Note below)	120
(9) Scholarship for Boys	100
(10) Administrative and incidental expenses :—	
(a) Secretary's Salary	55
(b) Office Expenses, Printing, Stationery, Advertising, etc.	70
	125
Total	£1,345

Note.—The Committee may, subject to the approval of the Department, apply this sum or any portion thereof, to the direct employment of County Teachers of Industrial Subjects at approved centres, who may be transferred from district to district, as required.

C. Allocation of Accumulated Funds :

Of the funds remaining unexpended from the working of the Scheme in previous sessions, the sum of £100 will be appropriated to meet the estimated deficit on the working of the Scheme for the present academic year; the remainder will be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

II. ITINERANT INSTRUCTION.

The Committee will employ one manual instructor, three teachers of Domestic Economy, and a specially qualified commercial instructor. The following are the general conditions in regard to their employment.

- (a) They are under the control of the Committee, and will receive their instructions through the Secretary of the Committee.
- (b) In centres where a course of instruction is being provided for the first time, it will, in general, be desirable for the instructor to pay a preliminary visit in order to see that the proposed accommodation is suitable, and to confer with the Local Committee with regard to arrangements for the course.
- (c) The itinerant teachers will, as a rule, be expected to give not less than four hours' actual teaching upon five days each week. (The general conditions for the employment of itinerant teachers of Manual Work and Domestic Economy are set forth in the Department's Circular Letter No. 21).
- (d) The Committee will submit to the Department, at the beginning of the session, a Time-Table and Itinerary, showing the proposed distribution of the time of the itinerant teachers for the Session 1912-13. This General Time-Table and Itinerary will be arranged at a Committee meeting held after the date fixed for the return of the Forms of Application from the different centres in the County.
- (e) The courses in Domestic Economy will, as a rule, be of six weeks' duration, lessons being given each day; but where it can conveniently be arranged, two courses may run concurrently. In this case the duration of the course will be three months, half the time in each week being devoted to one centre, and half to the other. The same rule will, in general, apply to the courses in manual instruction.
- (f) The salaries of itinerant teachers are payable monthly.

III. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, capitation grants at the rate of £3 per pupil for any number not exceeding ten, and at the rate of £2 per pupil for the remainder of the class, will be paid in respect of the attendance of girls at instruction in lace-making, crochet-work, dressmaking, needle-work, sprigging, embroidery, drawn thread work, shirt-making, hosiery-making, or such other industrial or domestic subject as may, from time to time, be approved by the Department.

In certain industrial subjects, such as lace-making, a knowledge of drawing is of great value to the worker. Where provision can be made for efficient instruction in Drawing, a further grant of 10s. per pupil may be paid in respect of those girls who have qualified for the grant referred to in the foregoing paragraph, and have received not less than 40 hours' instruction in drawing.

General Conditions for the Conduct of Classes and Payment of Grants.

- (1) The industry in which instruction is given shall be suited to the circumstances of the locality.
- (2) The grant may be claimed on account of pupils who have received during the session not less than 240 hours' instruction, as specified in Section 4 below. In order to qualify for the additional grant for drawing, a pupil must receive not less than 40 hours' instruction in that subject in addition to the 240 hours' instruction above-mentioned.
- (3) Grants may be paid in respect of a pupil's attendance at instruction in any one industrial subject for not more than two school sessions, but where circumstances have made it desirable to introduce a new industry, grants may be paid on account of a pupil for not more than three school sessions in all.

(4) The pupil, as part of the 240 hours' instruction, shall receive at least 40 hours' instruction in Domestic Economy subjects. (The 40 hours' instruction may be given in twenty lessons of two hours each, and must include practice. At least 30 hours must be devoted to Cookery; 10 hours may be given to Laundry Work. Not more than 60 hours' instruction in Cookery and Laundry-Work may be reckoned in the total of 240 hours).

(NOTE.—In order to assist managers of classes working under this section of the Scheme, to satisfy the conditions in regard to instruction in Domestic Economy, the Committee may, if they think it desirable, send a County Instructress to give the required course of instruction. It must be understood that where the services of the Committee's Domestic Economy Instructress are granted, the managers of the class are required to provide fire, light, and the necessary materials. The instruction given must be such as is applicable to the home life of those attending the course).

(5) The equipment and instruction must be satisfactory. (The Department's Inspectors will be specially directed to report how far the work is instruction, and how far the practice of an industry).

(6) The Sales and Wages Book and Attendance Registers must be satisfactorily kept.

(7) Grants will not be payable in respect of the attendance of pupils who are not over fourteen years of age at the time of admission to instruction, or who are on the Roll of a National School or of an Industrial School under the Irish Industrial Schools Act.

(8) Grants will not be payable under this section in respect of instruction in an industrial subject given by a teacher employed by the Committee.

(9) Managers intending to claim grants under this section must forward Form S. 47 to the Offices of the Committee on or before the 1st of October, 1912.

(10) Instruction must begin under a recognised teacher, before the 1st December at the latest.

Should the sum allocated for the purpose of this section of the Scheme not enable the Committee to pay off all the claims in full, at the rates mentioned above, the amount available will be divided in proportion to the claim submitted.

IV. TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS FOR BOYS.

(1) Scholarships for Boys are awarded on the results of a competitive examination held annually. Boys who, during the preceding School Year, have been in regular attendance at one of the following schools will be eligible to compete, viz. :—

(i) Primary Schools (only boys who have completed the course of the Sixth Standard of the National School Programme, or its equivalent, will be eligible to compete).

(ii) Elementary Evening Schools conducted under the Rules and Regulations of the Commissioners of National Education.

(iii) The Preparatory Course of Evening Technical Schools.

(2) The Scholarships will be of two kinds :—(a) Technical Scholarships, and (b) Apprenticeship Scholarships.

(A)—TECHNICAL SCHOLARSHIPS.

(Tenable only by Boys who shall have attained the age of 13 years on the 1st day of August in the year of examination.)

These Scholarships are tenable at (1) approved Day Technical Schools, (2) approved Day Trades' Preparatory Schools, or (3) other Schools, the main object of which is the instruction of pupils of an industrial type, and which may provide a course, exclusively followed by the pupils attending it, equivalent to that of a Day Trades' Preparatory School. The choice of

the school will remain with the winner of the Scholarship or his parent (or guardian) subject to the approval of the Department.

There will be three classes of Technical Scholarships :—

- (i) Scholarships of the value of £5, tenable at schools within a radius of five miles from the home of the Scholar ;
- (ii) Scholarships of the value of £10, tenable at schools outside a radius of five miles from the home of the Scholar ; Scholarships of this value are only awarded where there is no approved school of the type selected within a radius of five miles.
- (iii) Scholarships of the value of £20 to be granted to Scholars whose attendance at an approved school will necessitate residence away from his home.

Scholars will be required to be in attendance at the school selected at the beginning of the School Year, and in any case not later than the 1st of October. The amount of the Scholarship will be paid in instalments to the parents or guardians of the scholar on or about the 15th October, 15th January, 15th April, and 15th July. The second and subsequent instalments will be paid only after satisfactory reports of attendance and progress have been received from the school authorities.

Scholarships will be tenable for one year, but may be renewed for a second and third year on the recommendation of the Department's Inspector.

Holders of these Scholarships will be eligible after attaining the age of sixteen years, for election without further examination by the Committee, on the recommendation of the Department, to an Apprenticeship Scholarship.

(B)—APPRENTICESHIP SCHOLARSHIPS.

(Tenable only by Boys who have attained the age of 16 years.)

These Scholarships are tenable during the period of apprenticeship to an approved trade extending over a period of five years. They may be awarded on the result of the annual Examination for Technical and Apprenticeship Scholarships, or in accordance with the terms of the preceding paragraph.

The choice of the trade to be followed will remain with the winner of the Scholarship, subject to the approval of the Department.

It will be a condition of tenure that the holder shall be duly indentured to a Firm recognised by the Department for the purpose of these Scholarships, and under conditions which have been approved by them. The more important of these conditions are shown below.

It will also be a condition of tenure that the holder shall follow an approved course of study in an Evening Technical School or a Special Course of instruction for Apprentices organized under the Department's Programme for Technical Schools and Science and Art Schools and Classes, and Scholars must submit, for the approval of the Department, a timetable of their proposed courses of study under these conditions. Scholars will be required to begin attendance at the approved course of study at the same time that they are admitted to apprenticeship.

Apprenticeship Scholarships are intended to provide a maintenance allowance during the period of Apprenticeship and their value for the period may be estimated at about £100. This will be paid in such sums as, together with the weekly wages paid by the employer, will amount to not less than 15s. per week throughout the period of Apprenticeship. As the rate of wages paid an apprentice commonly increases throughout the period of Apprenticeship, beginning at a small sum in the first year, the amount to be provided by the Committee for the Scholarship will decrease in proportion.

The amount will be payable in such instalments as may be approved by the Department, regard being had to the special circumstances of each case.

Where an Apprenticeship premium is payable, the Department will be prepared, in approved cases, to provide for its payment.

(3) The Committee may, at any time, subject to the approval of the Department, determine a Scholarship, without notice, upon being satisfied that its continuance is, for any reason, undesirable.

(4) In the case of difficulties arising in connection with the award or retention of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

CONDITIONS REGULATING THE DEPARTMENT'S RECOGNITION OF INDENTURES.

(5) In selecting Firms with whom Scholars may be apprenticed the Department will arrange that the following conditions shall be observed :—

- (i) Satisfactory arrangements to be made whereby the Apprentice Scholars will have an opportunity of learning all the various branches of their trade.
- (ii) In centres where provision is made for suitable Day Classes, Apprentice Scholars to be permitted to attend during working hours such classes as the Department may approve, the total number of hours so allowed not to exceed an average of eight hours weekly. The Apprentice Scholars to be paid for the time spent at these classes, but the total number of hours worked, including the hours of attendance at classes, shall not exceed that recognised in the particular trade as constituting a week's work.
- (iii) Where suitable Day Classes are not available, facilities to be given to Apprentice Scholars to attend a course of instruction in Evening Technical Schools or Classes, the working hours to be reduced by an equivalent number of hours, such reduction not to exceed a total of eight hours per week.
- (iv.) The authorities of the school or classes which the Apprentice Scholar attends shall certify as to the number of hours during which the Scholar was present at the class each week, and on the production of such certificate, the Scholar shall be paid by the employer for the hours mentioned in the certificate.
- (v) The Department's Inspectors shall be entitled to visit the various places where the Apprentices are employed at any time during working hours, and inquire into grievances or complaints that may be made either by the employer or the Apprentice Scholar.
- (vi) The Department shall have power to cancel the Indenture and to terminate the Scholarship should the Apprentice prove unsatisfactory, or to transfer the Apprentice to another Firm if for any reason it appears desirable to them to do so.

EXAMINATION FOR TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS, JUNE, 1913.

(6) The Examination will be held by the Department of Agriculture and Technical Instruction, on the 20th of June, 1912, at centres which will be fixed when all the applications have been received. The subjects and time-table of the examinations will be :—

Arithmetic.—Thursday, June 19th, 11 a.m. to 12.30 p.m.

The principles of Vulgar and Decimal Fractions, with examples involving addition, subtraction, and multiplication.

Proportion, Simple Interest, Practice, Unitary Method.

The Metric System.

Methods of Weighing and Measurement.

Measurement of lengths, areas, and volumes.

English.—Thursday, June 19th, 1 p.m. to 2.15 p.m.

Composition : A short essay or letter, of thirty or forty lines—with correct spelling, grammar, and punctuation—on some familiar subject.

Ability to answer, in fully-formed sentences, questions on the meaning of words and phrases, and on the matter of a passage read.

Grammar : The construction of words ; prefixes, affixes, and roots.

Analysis of simple and complex sentences.

Correction of faulty sentences.

Paraphrasing a short poetical extract.

Drawing.—Thursday, June 19th, 2.30 p.m. to 3.30 p.m.

1. Freehand Drawing.

2. Simple exercises in Design.

3. Model Drawing of Simple Common Objects.

4. Simple Geometrical Drawing.

And, in cases in which Committees decide that Irish and Mathematics shall be included as optional subjects of examination.

Irish.—Thursday, June 19th, 3.45 p.m. to 5.15 p.m.

1. *An Tarbh Breac. Tadhg Gabha* : with questions on grammar, etc., arising out of the texts.

2. A passage, or passages, from some other Irish text or texts for translation into English.

3. Short sentences, colloquial phrases, and a short passage for translation from English into Irish.

Mathematics.—Thursday, June 19th, 3.45 p.m. to 5.15 p.m.

Algebra.—Problems involving simple and simultaneous equations, fractions, factors, and square root.

Euclid.—Book I., with practical exercises on the problems.

Practical Geometry.—Mensuration of rectilinear figures from diagrams drawn to scale.

Pupils will be required to draw and measure simple geometrical figures accurately.

Candidates may be examined on any part of these Syllabuses.

One hundred marks will be assigned for Arithmetic, one hundred for English, fifty for Drawing, and fifty for Irish or Mathematics.

(7) Only those candidates will be eligible for admission to the examination :

(a) Who will be over thirteen and under sixteen years of age on the 1st August, 1913.

(b) Whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 1st June, 1913.

(8) Forms of application for admission to the examination may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 1st June.

(9) Successful candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(10) The Committee may refuse to award the full number of Scholarships offered for competition should a sufficient number of qualified candidates not show sufficient merit.

Early in the Academic Year, 1912-13, copies of the Scholarship Scheme shall be sent to all Schools eligible to present candidates, situated within the area administered by the Committee, and an advertisement of the Scheme and of the number of Scholarships to be competed for in June, shall be inserted once during the month of May in the newspapers circulating within this area.

V. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1913, award Scholarships to girls who have received a satisfactory primary education, to enable them to attend a regular course of instruction and training in Domestic Economy. The object of these Scholarships is to cultivate intelligence, thrift and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at any of the Residential Schools of Domestic Training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a fee of £2 to the Managers of the School on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the School Managers, will entitle the Scholar to board, residence, and training for one academic year.

I. *General Conditions regulating the Award of Scholarships.*

(1) The Scholarships will be tenable only by girls—

- (a) who are over sixteen and under twenty-five years of age on the 1st of June, 1913; and
- (b) whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 1st of June, 1913.

(2) The selection of the scholars will be made by a Selection Committee of the Technical Instruction Committee who will satisfy themselves by whatever means they consider desirable, that the scholars selected have received an education equivalent to that of the Fifth Standard of a National School.

(3) Forms of application for Scholarships may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 2nd of June. Each application must be accompanied by not less than two testimonials, one of which must be from a local clergyman, and one from a District or County Councillor.

(4) Selected candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(5) Selected candidates shall enter the Residential School for a fortnight on probation. Any candidates found unsuitable to undergo the course of training will, at the expiration of the period of probation, be required to leave, and their places shall be filled by selection from the other qualified candidates. The fee paid to the School Managers shall be refunded to those scholars who are required to leave the school under these conditions.

(6) The amount of the Scholarships will be paid to the Managers of the Schools in two half-yearly instalments, one on or about the 31st January, the other on or about the 31st July. Payment of these instalments will be authorised by the Department on receipt of satisfactory reports from their Inspectors.

(7) All Scholarships shall terminate on the 31st July, 1914.

(8) The Committee may refuse to award the full number of Scholarships should a sufficient number of suitable candidates not be forthcoming, and they may determine a Scholarship at any time, without notice, upon being satisfied that its continuance is for any reason undesirable.

(9) In the case of difficulties arising in connection with the awarding or holding of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

An advertisement of the Scholarship Scheme will be inserted once, early in the month of May, in the newspapers circulating within the area administered by the Committee.

II. *Conditions regulating the recognition of Residential Schools of Domestic Training.*

(1) In order that a Residential School of Domestic Training may be recognised by the Department under this Scheme, the Managers must provide a satisfactory course of instruction in the following subjects :—

- Household Management (including the keeping of accounts).
- Cookery (including the selection of menus for small incomes).
- Needlework (repairing, adapting and dressmaking).
- Laundrywork.
- Hygiene (including sick nursing and the care of the young).

At least thirty hours per week must be devoted to the foregoing subjects. The curriculum may also include one or more of the following subjects if adequate provision is made for both practical and theoretical instruction :

- Dairy-work.
- Poultry-rearing.
- Bee-keeping.
- Cottage-Gardening.

(2) There must be on the staff of the school a certificated teacher of Domestic Science who devotes at least thirty hours per week to the instruction of residential pupils. If the number of pupils exceeds 18, there must be one such teacher for each 18, or fraction of 18, pupils.

(3) The School Managers must satisfy the Department that the dormitory accommodation, and other provisions, of the School are adequate and satisfactory.

(4) Within a fortnight after the re-opening of the School in any year, the Managers must forward to the Department the complete time-table on Form S. 148, copies of which will be furnished by the Department upon application. This time-table will show the distribution of time to the various subjects of the course, and must receive the written approval of the Department.

(5) The School shall be at all times open to the Inspectors of the Department.

VI. GENERAL CONDITIONS.

(1) The Scheme is not intended to apply to children under fourteen years of age, but such children who have been placed in the Sixth Class of a National School, or who have received an equivalent education, may be admitted to classes, provided that there is accommodation available. Under no circumstances may scholars on the roll of a Primary School attend classes under this Scheme which meet during Primary School hours.

(2) Schools or classes conducted or aided under the provisions of the Scheme shall be at all times open to the Department's Inspectors. (The Inspectors will, from time to time, report to the Department on the condition and suitability of the school buildings or class-rooms, the character of the instruction and its suitability to the needs of the locality, the sufficiency of the teaching staff for the number of students under instruction, the progress of the students—which they may ascertain in such a manner as may be necessary—the method of registration, and, generally, the observance of the provisions of the Scheme).

(3) All classes eligible for grants under the conditions of the Programme for Technical Schools and Science and Art Schools and Classes shall be conducted in accordance with the Regulations of the Programme.

(4) Classes conducted or aided under the Scheme shall not be of such a size as to impair the efficiency of the instruction. (A practical class should consist of not more than twenty students under one teacher, and a theoretical or demonstration class of not more than forty students. Local Committees should assist teachers in keeping classes within these limits).

(5) Control will be exercised over the admission to classes so that students may take only associated subjects, and admission to certain classes may be limited by entrance examinations in order that the classes

may be of a manageable size, and that students selected may be capable of taking full advantage of the instruction.

(6) Classes will, unless in exceptional circumstances, be closed should the average attendance for four successive lessons fall below six.

(7) Attendance Registers shall be carefully, regularly, and punctually marked.

(8) A Local Committee of Management shall be formed in each centre in the Rural Districts where classes are to be held. The Committee formed shall appoint an Honorary Secretary, and place itself in communication with the County Joint Committee. In an Urban District the classes shall be under the management of a Local Committee appointed for this purpose by the Urban District Council. Wherever the instruction of girls is involved, a number of ladies should be included in the Local Committee.

The duties of a Local Committee are :—

(a) To arrange for suitable accommodation for the courses of instruction to be given ; to awaken local interest, and to make due provision for the starting or resumption of the courses.

(b) To assist in securing regular and punctual attendance at the classes.

(c) To visit the classes from time to time, and to check and sign the registers, and

(d) To make recommendations to the County Committee as to local requirements in connection with the classes.

(9) Full particulars of the qualifications and experience of any teacher whom it is proposed to engage shall be submitted to the Department, and their approval of the appointment obtained, in writing, before the appointment is actually made.

(10) The previous written approval of the Department shall be obtained for any expenditure upon additional equipment, or for any purpose not covered by the proposals under the head of Finance. (Approval of such expenditure will not be given unless the proposals have been submitted for the Department's sanction *before any liability is incurred*).

(11) Accurate returns of such particulars as are required by the Department shall be made at the specified times.

(12) Within seven days after any meeting of the Committee, a copy of the minutes of proceedings of that meeting, as entered in the minute book, shall be furnished to the Department.

(13) The accounts of the Committee shall be treated as part of the accounts of the Local Authorities, and will be audited as such by the Auditor of the Local Government Board.

The Scheme is subject to revision at the close of the academic year.

COUNTY FERMANAGH.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

The Scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban District of Enniskillen, and to the Rural Districts within the administrative area of the County Council.

Population of the County:—Urban District, 4,847; Rural Districts, 56,989; total, 61,836.

Valuation of the County:—Urban District, £14,342; Rural Districts, £228,341; total, £242,683.

Value of 1d. rate:—Urban District, £60; Rural Districts, £952; total, £1,012.

The local contribution from rates will be paid over to the Committee in two instalments, in April and October, 1912.

Chief Industries.

The population is almost entirely devoted to agricultural pursuits.

Objects of the Scheme.

The objects of the Scheme are to provide instruction in lace and crochet work, needlework, manual training (woodwork), domestic economy, and hygiene.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Instruction in Industries.
- III. Instruction in Domestic Economy subjects, and Manual Training.
- IV. Training School for Lace Teachers.
- V. General Conditions.

I. FINANCE.

A. Estimated Income :

1. Contribution from the County Council from rates levied over the Rural Districts in the Financial Year ending 31st March, 1913	£350
2. Contribution from the Urban District Council of Enniskillen (the produce of a rate of 1d. in the £ levied in the Financial Year ending 31st March, 1913)	50
3. Contributions from the Department :—	
(1) Annual contribution from Endowment	£400
Less amount equal to one-half the grant earned under Section II (b) of the Programme for Technical Schools, etc.	50
(2) Grants under the Programme for Technical Schools, etc.	350
(a) Under Section II (a), etc.	180
(b) Under Section II (b)	100
4. From extern Day Secondary Schools for services of Teachers	280
5. Students' Fees and Sales of Products of Classes	50
	55
Total	£1,144

B. Estimated Expenditure :

1. Salaries and expenses of Teachers of Industrial Subjects	£320
2. Salary of Principal of Enniskillen Technical School	170
3. Salary of Instructor in Manual Work	125
4. Salary of Instructress of Domestic Economy	105
5. Salaries of other Teachers at Enniskillen Technical Schools	110
6. Travelling Expenses of Teaching Staff, referred to at (3), (4) and (5), and class expenses	70
7. Scholarships at Enniskillen Technical School	20
8. Rents, Insurance, Interest on, and repayment of Loan	40
9. Administration and Incidental Expenses :—	
(a) Secretary's Salary	£60
(b) Office expenses, printing, stationery, advertising, etc.	60
	£120
Total	£1,080

C. Allocation of Accumulated Funds :

The balance unallocated in the above Scheme may be applied to meeting the deficit on the working of the Scheme in previous sessions, and to such other purposes as the Committee, with the approval of the Department, may, from time to time, determine.

II. INSTRUCTION IN INDUSTRIES.

To improve the work in lace and crochet-making and in needlework carried on throughout the county, the Committee may appoint nine teachers. These teachers will give instruction in centres to be fixed by the Committee, with the approval of the Department, and each teacher will be required to give two lessons of three hours' duration each, on three days per week (or an equivalent amount of teaching), throughout the session. The two lessons per day may, or may not, be given in the same centre; but arrangements will be made whereby at least six hours' instruction per week shall be given at each centre.

A salary of £60 per annum may be allowed when the teacher is employed for thirty hours, or upwards, per week.

Conditions under which the Classes will be held.

(1) A local Committee to be formed, who shall make known the objects of the instruction, obtain a suitable class-room, and be responsible for the proper cleaning and lighting of the room.

(2) All changes in the Time Table of the classes to be at once notified to the Committee.

(3) An accurate account of all receipts and expenditure to be kept for each class in the books provided for the purpose by the Department.

(4) A deduction of one penny per shilling to be made from the sale price of all articles. (The amounts so raised will be applied in meeting the cost of rent, fuel, postages, laundering, and incidental expenses, and in forming a fund to be used in paying ready cash for work done).

(5) Laundering to be paid for at a rate not exceeding 5d. per pound's worth of work washed.

(6) Should the fund referred to at (4) above exceed, at the close of any academic year, one-tenth of that year's sales, a bonus may be granted out of the excess to each worker, at a rate of not more than 6d. per £. of the wages paid in the case of lace and crochet-workers, and 9d. per £. in the case of spriggers. (This bonus will only be paid after the accounts have been audited by the Secretary to the County Committee, and on his certificate that the position of the industry warrants such payment).

(7) Any balance of the excess which may remain after providing for the above purposes to be returned to the County Committee.

III. INSTRUCTION IN DOMESTIC ECONOMY AND MANUAL TRAINING.

The Committee will appoint an instructress in Domestic Economy subjects and Hygiene, and an instructor in Manual Training (woodwork), who shall conduct courses of instruction in these subjects at centres and at times to be fixed by the Committee, with the approval of the Department.

These courses will consist of at least thirty lessons of two hours' duration each, and will extend over a period of about six weeks. A fee not exceeding 2s. 6d. will be charged for admission to each class.

IV. TRAINING SCHOOL FOR LACE TEACHERS.

A school for the training of skilled workers as teachers of lace and sprigging classes will be conducted in connection with the Technical School, Enniskillen. Instruction will be provided in lace-making, or sprigging, laundering, drawing and design, English, commercial arithmetic, business procedure, and Hygiene.

Classes will be held daily under the supervision of a principal holding special qualifications.

Students, while in attendance at the school must continue to practice their industry.

Candidates for entry must pass an examination in English, arithmetic, drawing, and lace-making or sprigging.

Recognition of qualifications to give instruction in lace-making or sprigging will be accorded to those students only who attend satisfactorily during one complete session of twelve months, and who reach a satisfactory standard in an examination which will be held by the Department.

V. GENERAL CONDITIONS.

(See Section 6 Scheme for County Clare).

COUNTY GALWAY.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

The Scheme, subject to the provisions requiring local contributions from rates (see Finance), is applicable to the Urban District of Ballinasloe and to all the rural districts within the administrative area of the County Council.

Population of the area administered under the Scheme :—Urban District, 4,904 ; Rural Districts, 174,219 ; total, 179,123.

Valuation of the area administered under the Scheme :—Urban District, £9,318 ; Rural Districts, £444,622 ; total, £453,940.

Value of 1d. rate :—Urban District, £39 ; Rural Districts, £1,852 ; total, £1,891.

The local contribution from rates (Urban and County) will be paid over to the Committee before the close of the financial year ending 31st March, 1913.

Technical Instruction Committee.

The Committee is a Joint Committee of the Galway County Council and the Urban District Council of Ballinasloe. It consists of sixty-one members, of whom fourteen are Councillors, and forty-seven added members.

Chief Industries.

Agriculture and allied industries, fisheries, distilling, woollen weaving, machine knitting, marble quarrying, etc.

Objects of the Scheme.

The objects of the Scheme are to provide, mainly by means of Itinerant Instructors, and scholarships for boys, instruction in science, technological, commercial, industrial and domestic economy subjects, and to maintain a Technical School in the Urban District of Ballinasloe.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Itinerant Instruction.
- III. Instruction in Industries.
- IV. Technical School, Ballinasloe.
- V. Technical and Apprenticeship Scholarships for Boys.
- VI. General Conditions.

I. FINANCE.

A. Estimated Income.

(1) Local Contributions :

(a) From rates levied over the Rural District in the Financial Year ending 31st March, 1913	£900
(b) The produce of a rate of 1d. in the £. levied over the Urban District of Ballinasloe in the Financial Year ending 31st March, 1913.	35
	<hr/> £935

(2) Contributions from the Department :—

(a) Annual Contribution from Endowment ..	£800	
Less amount equal to one half of the grant earned under Section II. (b) of the Technical School Programme (see below)	200	600
(b) Grants under the Programme for Technical Schools, etc.		
(i.) Under Section II. (a).	30	
(ii.) Under Section II. (b).	400	
(iii.) Under Section IX. (a).	50	480
		15
(3) Sundry Receipts,		
Total	£2,030	

B. Estimated Expenditure :

(1) Instruction in Rural Areas :

(a) Salaries of three Instructresses in Domestic Economy	£295
(b) Salary of one Instructress in Hygiene and Sick Nursing	90
(c) Salaries of two Instructors in Manual Work	265
(d) Salary of one Teacher of Dressmaking	70
(e) Provision for increases in Salaries of Teachers	10
(f) Travelling Expenses of Teachers	80
(g) Class Expenses, including cost of supplies, rent of rooms, removal of equipment, etc.	140

(2) Permanent Centre of Instruction—Ballinasloe Technical School :—

(a) Salary of Headmaster	£150
(b) Salary of Commercial Instructor	150
(c) Rent, Maintenance of Classes, etc.	150
	450

(3) Scholarships for boys

(4) Administrative and incidental expenses :—	
(a) Salary of Secretary	£100
(b) Office Expenses, printing, stationery, advertising, etc.	40
(c) Deputation Expenses and Sundries	10
	150

Total £2,070

C. Allocation of Accumulated Funds :

Of the funds remaining unexpended on the working of the Scheme in previous sessions, the sum of £40 will be applied to meet the estimated deficit on the working of the Scheme for the present Academic Year ; the remainder will be reserved for such purposes, as the Committee, with the approval of the Department, may, from time to time, determine.

II. ITINERANT INSTRUCTION.

(1) The itinerant teachers are under the control of the Committee, and will receive their instructions through the Secretary to the Committee.

(2) In centres where a course of instruction is to be held for the first time, it will, in general, be desirable for the instructor to pay a preliminary visit in order to see that the proposed accommodation is suitable, and to confer with the local Committee with regard to arrangements for the course.

(3) The itinerant teachers will, as a rule, be expected to give not less

than four hours' actual teaching five days each week. (The general conditions for the employment of itinerant teachers are set forth in the Department's Circular Letter, No. 21).

(4) The Committee will distribute a Form of Application for courses of instruction by itinerant teachers, and submit to the Department a time-table and itinerary showing the proposed distribution of the time of the itinerant teachers for the session 1912-13.

(5) The courses in domestic economy will, as a rule, be of six weeks' duration, lessons being given each day, but, where it can conveniently be arranged, two courses may be conducted concurrently. In this case the duration of the course will be three months, half the time in each week being devoted to one centre and half to the other. The same rule will, in general, apply to the courses in manual instruction.

(6) The teacher of sick nursing and hygiene shall give short courses of practical instruction in selected centres, in accordance with a time-table to be previously approved by the Department.

(7) In the case of the courses conducted by one of the Domestic Economy Instructresses the Committee will rent a cottage in a populous district, preferably a district containing a number of labourers' cottages. The Instructress will reside in the cottage and will conduct classes on certain days weekly for a fixed period, say, ten or twelve weeks. The cottage will be furnished with essentials only and in keeping with the requirements of a cottage of its class. It will be managed so as to show how a household may be conducted on limited resources. The time of the Instructress which is not occupied in class work at the cottage will be devoted to making house to house visits in the neighbourhood with a view to affording such information in practical subjects as the circumstances of cases may suggest, special attention being given to practical demonstration in the proper use of such utensils and food materials as are available in the majority of cottages.

The number of students admitted to a class held at the cottage in which the Instructress resides should not exceed eight or ten. The necessary furniture will be provided by the Committee.

(8) All expenses in connection with these courses are borne by the Committee.

(9) This Section shall apply to the staff of the Technical School, Ballinasloe, when engaged in teaching in the rural areas.

III. INSTRUCTION IN DRESSMAKING.

The services of the teacher of dressmaking will be available at any centres in the County which may be selected by the Committee and will be retained for a period of not less than twelve months at each centre. If a satisfactory attendance of pupils is not maintained at any centre the classes will be discontinued and the teacher transferred to another centre at which satisfactory arrangements can be made for taking advantage of the instruction.

IV. TECHNICAL SCHOOL, BALLINASLOE.

A sum of £300 is provided for salaries of teachers at the Technical School, Ballinasloe, and £150 is provided for the maintenance of the School and for the provision of such additional teachers as may be decided upon with the approval of the Department.

In addition to the courses conducted by the Headmaster and Commercial teacher, the County Committee may, if they consider it desirable, provide courses in Hygiene and Dressmaking.

The services of the whole-time officers engaged at the school will also be utilised for the purpose of conducting courses in rural districts of the county.

V. TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS FOR BOYS.

(See Section IV. Scheme for County Clare).

VI. GENERAL CONDITIONS.

(See Section VI. Scheme for County Clare).

QUEEN'S COUNTY.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

The Scheme, subject to the provisions requiring local contributions from the rates (see Finance), is applicable to all the rural districts within the administrative area of the County Council.

Population of the County, 54,629. Valuation, £257,947. Value of 1d. rate, £1,074.

The local contribution from the rates will be paid over to the Committee before the close of the financial year ending 31st March, 1913.

Committee of Agriculture and Technical Instruction.

The Committee was appointed on the 13th June, 1911, and will cease to hold office on the 13th June, 1914. It consists of fifty-three members, of whom twenty-one are County Councillors and thirty-two added members.

Chief Industries.

Agriculture and allied industries, milling, malting, brewing, coal mining.

Objects of the Scheme.

The objects of the Scheme are to provide, mainly by Itinerant Instructors and by scholarships, instruction in technological, science, art, commercial and domestic economy subjects, and to maintain a Technical School at Maryborough.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Itinerant Instruction.
- III. Technical School, Maryborough.
- IV. Scholarships for Girls.
- V. General Conditions.

I. FINANCE.

A. Estimated Income :

(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1913,	£490
(2) Contributions from the Department :—	
(i) From Endowment	£400
Less amount equal to one-half of the grant earned under Section II. (b) of the Programme for Technical Schools, etc.	100
	£300
(ii) Grants under Programme for Technical Schools, etc. :—	
(a) Under Section II. (a)	£22
(b) Under Section II. (b)	200
(c) Under Section IX. (a)	45
	267
	627
(3) Students' fees, sales, etc.	40
Total	£1,157

B. Estimated Expenditure :

(1) Salary of one Instructor in Manual Work	£150
(2) Salary of one Instructress in Domestic Economy	105
(3) Salary of Teacher of Commercial Subjects	140
(4) Travelling Expenses of above Teachers	75
(5) Salary of Teacher of Typewriting and Shorthand	80
(6) Travelling Expenses of Teacher of Typewriting and Shorthand	20
(7) Expenses of Classes, including rent of rooms, and cost of removal of equipment	75
(8) Scholarships for Boys	70
(9) (i) Scholarships for Girls	£180
(ii) Allowance in respect of the instruction of Scholarship-holders at £5 per scholar	60
	240
(10) Equipment, new and renewals	50
(11) General Administration Account	130
Total	£1,135

C. Allocation of Accumulated Funds :

The funds remaining unexpended from the working of the Scheme in the Session 1911-12, together with the balance shown above, will be available for the provision of Typewriters for the proposed classes in Typewriting and for such other purposes as the Committee may, with the approval of the Department, determine.

II. ITINERANT INSTRUCTION.

(a) The subjects to be taught will include manual work in wood, cookery, laundry-work, needlework and household management with hygiene (if possible). The courses of instruction will, as a rule, extend over six weeks, or, where two centres can be taken concurrently, three months. In any case the courses will be so arranged as to secure at least thirty lessons for each of two classes at each centre.

(b) The centres for these courses will be selected by the Committee on consideration of the applications from all eligible centres at the beginning of the session.

(c) The salaries of itinerant teachers shall be paid monthly and shall constitute a first charge on the funds of the Committee. Salaries, allowances and conditions of employment are generally as set forth in the Department's Circular Letter No. 21.

III. TECHNICAL SCHOOL, MARYBOROUGH.

The Committee will maintain a Technical School at Maryborough at which the instruction afforded will be mainly in commercial subjects.

IV. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1913, award a limited number of Scholarships to girls who have received a satisfactory primary education, to enable them to attend a regular course of instruction and training in Domestic Economy. The object of these Scholarships is to cultivate intelligence, thrift and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at Residential Schools of Domestic Training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a fee of £2 to the Managers of the School on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the School Managers, will entitle the Scholar to board, residence, and training for one academic year.

General Conditions regulating the Award of the Scholarships and Conditions Regulating the Recognition of Residential Schools of Domestic Training.

(See Section V. Scheme for County Clare).

V. GENERAL CONDITIONS.

(See Section VI. Scheme for County Clare).

COUNTY TYRONE.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

The Scheme, subject to the provisions requiring local contributions from the rates is applicable to the Urban Districts of Cookstown, Dungannon, Omagh, and Strabane, and to the Rural Districts within the administrative area of the County Council.

Population of the County :—Urban Districts, 17,458 ; Rural Districts, 125,207 ; Total, 142,665.

Valuation of the County :—Urban Districts, £48,041 ; Rural Districts, £417,360 ; Total, £465,401.

Value of 1d. rate :—Urban Districts, £200 ; Rural Districts, £1,739 ; Total, £1,939.

The local contributions from the rates will be paid over to the Committee by the several contributing authorities in two instalments on the 30th September, 1912, and the 31st March, 1913.

Technical Instruction Committee.

The Committee is a Joint Committee of the Tyrone County Council and the Urban District Councils of Cookstown, Dungannon, Omagh, and Strabane. It consists of twenty-three members, of whom thirteen are Councillors, and ten added members.

Chief Industries.

Linen manufacture, shirt-making, woollen manufacture, brick-making, pottery manufacture, carpentry, and agriculture. There are also railway works at Augnacloy.

Objects of the Scheme.

The objects of the Scheme are to provide, mainly by means of Evening Schools and Itinerant Classes, instruction in science, art, technological, commercial, and domestic economy subjects, chiefly for persons engaged in various industries during the day.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Subjects of Instruction.
- III. Instruction in Urban Districts.
- IV. Instruction in Rural Districts.
- V. General Conditions.

I. FINANCE.

A. Estimated Income :

- | | |
|---|------|
| (1) Contribution from the County Council from rates levied over the Rural Districts in the Financial Year ending 31st March, 1913 | £400 |
| (2) Contributions from the Urban District Councils of Omagh, Strabane, Dungannon, and Cookstown (the produce of a rate of 1d. in the £. levied in the Financial Year ending 31st March, 1913) | 172 |

(3) Contributions from the Department :—

(1) Annual Contribution from Endowment	£850	
Less amount equal to one-half the grant paid under Section II. (b) of the Programme for Technical Schools, etc.	25	825
(2) Grants under the Programme for Technical Schools, etc.		
(a) Under Section II. (a)	430	
(b) Under Section II. (b)	50	480
(4) Students' Fees		80
(5) Sale of books, class materials, etc.		40
Total		£1,997

B. Estimated Expenditure :

(1) Salary of Organising Headmaster and Secretary	£250
(2) Salaries of two Instructors in Manual Work (one at £135 and one at £120 per annum)	255
(3) Salary of County Art Teacher	125
(4) Salary of Instructress in Domestic Economy	80
(5) Salaries of other Teachers	314
(6) Travelling Expenses and Subsistence Allowance of Teachers ..	200
(7) Maintenance Expenses of Schools	272
(8) Expenses of classes	200
(9) Repairs to premises	50
(10) Prizes	40
(11) Interest on and Repayment of Loan	93
(12) Grant towards Salary of Special Teacher of Repoussé Work at Fivemiletown	25
(13) Purchase of Equipment	50
(14) Administration and Incidental Expenses	85
Total	£2,039

C. Allocation of Accumulated Funds :

Of the funds remaining unexpended from the working of the Scheme in previous sessions the sum of £42 will be devoted to meeting the deficit on the Scheme as shown above, the remainder may be applied to such other purposes, as the Committee, with the approval of the Department, may from time to time determine.

II. SUBJECTS OF INSTRUCTION.

The subjects of instruction will include the following and such other subjects as may be found suitable :—

Introductory Course :

English, Mathematics, Experimental Science, Drawing, Manual Work.

Commercial Subjects :

Shorthand and typewriting, book-keeping, business methods, commercial arithmetic, commercial English, commercial geography, commercial law, accountancy.

Mathematics :

Practical mathematics.

Science :

Building construction, carpentry and joinery, elementary science, magnetism and electricity, physics, chemistry, mechanics.

Art Subjects :

Freehand drawing, model and geometrical drawing, design, modelling in clay, drawing in light and shade, painting from still life, etc.

Handicraft :

Woodwork.

Domestic Science :

Cookery, laundry-work, dress-making, needle-work, sick nursing, housewifery.

The teaching of these subjects will be provided mainly by the following Instructors :—

(1) An Organising Head Teacher, whose duties shall be :—

- (a) To act as Secretary to the County Joint Technical Instruction Committee.
- (b) To organise Technical Schools and Classes in the four Urban Districts, and to arrange for courses of instruction in such other centres as the Committee may, from time to time, determine, and generally to carry out the provisions of the Scheme in accordance with the instructions of the Committee, acting in conjunction with the Department of Agriculture and Technical Instruction.
- (c) To give instruction and to supervise the work in each of the four Urban Districts.

(2) Two Manual Instructors whose services shall be available in the four Urban Districts and at such other centres as may, from time to time, be arranged.

(3) An Instructress in Domestic Economy Subjects.

(4) An Art Teacher whose services shall be available in the four Urban Districts and at such other centres as may, from time to time, be arranged.

III. INSTRUCTION IN URBAN DISTRICTS.

The administration of the Scheme in each Urban District will be in the hands of a local Committee appointed in accordance with the terms of paragraph 8 of the General Conditions.

The teaching will, for the most part, be given by the Instructors referred to in Section II. Any subjects not provided for by these Instructors may be taught by local teachers.

IV. INSTRUCTION IN RURAL DISTRICTS.

The services of the Instructors appointed under this Scheme will also be available, as far as may be possible, in other centres in the County. The instruction most likely to be of value in such districts is, in general, that which will be imparted by the Manual Instructors and the teacher of Domestic Economy.

The courses of instruction in Rural Districts will extend generally over six weeks, but where two centres can be worked concurrently the course may extend over three months. In either case it will be possible to secure at least thirty lessons in each course.

V. GENERAL CONDITIONS.

(See Section VI. Scheme for County Clare).

URBAN DISTRICT OF PORTADOWN.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

Chief Industries.

Engineering, building, commercial, milling, fruit preserving, brickmaking, linen weaving, handkerchief weaving and hemstitching.

Population, 11,727. Valuation, £30,782. Value of 1d. rate, £128. The local contribution from the rates will be paid over to the Committee in two instalments in October, 1912, and February, 1913.

Technical Instruction Committee.

The Committee was appointed in February, 1911, and will cease to hold office in January, 1914. There are fifteen members of whom eight are Urban District Councillors and seven added members.

Objects of the Scheme.

The objects of the Scheme are to provide (1) instruction by means of systematic courses in Science, Art, Technological, Commercial and Domestic Subjects in evening classes for persons engaged in various occupations during the day. (2) Instruction of a general, scientific, and technical nature for boys over thirteen years of age, in the Day Trades Preparatory School as a preparation for the local industries. (3) instruction for apprentices in the Sciences and Principles underlying their trades, by means of a Day School for Apprentices.

Premises.

The Technical School is situated in Armagh Road, and contains the following rooms:—Lecture-room, Art Room, Domestic Room, Chemical and Physical Laboratory (with Balance and Store Room), Mechanical Laboratory, Wood Workshop, Engineering Workshop, Engine Room, Dark Room, Cloak Room, two Class-rooms, Scullery, Offices, etc.

The Scheme is set out under the following heads:—

I. Finance.

II. Subjects of Instruction in the Technical School.

III. Day Trades Preparatory School.

IV. General Conditions.

I. FINANCE.

A. Estimated Income:

(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £. levied in the financial year ending the 31st March, 1913)	.. ..	£115
(2) Students' fees.. ..	.. ..	110
(3) Subscriptions to Scholarship and Prize Fund .. ..	.. ..	20
(4) Contributions from the Department:—		
(1) From Endowment .. ..	.. ..	£500
Less amount equal to one-half the grant earned under Section II. (b) of the Programme for Technical Schools, etc...	.. ..	10
		490
(2) Grants under the Programme for Technical Schools, etc.:—		
(a) Under Section II. (a) .. ..	.. ..	600
(b) Under Section II. (b) .. ..	.. ..	20
		620
(3) Grant towards the maintenance of the Day Trades Preparatory School (estimated) .. ..	.. ..	450
(5) Sale of Books, Class Materials, etc. .. ..	.. ..	30
(6) Grants from National Education Board for instruction in Cookery to National School Children .. ..	.. ..	15
		£1,850

B. Estimated Expenditure :

(1) Salary of Principal	£325
(2) Salaries of other Teachers	975
(3) Scholarships and Prizes (Evening School)	20
(4) Scholarships (Day Trades Preparatory School)	32
(5) Caretaker's Wages	52
(6) Fuel, Light and Cleaning	50
(7) Rents and Insurance	85
(8) Equipment (new and renewals)	50
(9) Class Materials	50
(10) Repairs to Premises, Grounds, etc.	10
(11) Printing, Stationery and Advertising	40
(12) Administrative and Incidental Expenses	50
Total	£1,739

II. SUBJECTS OF INSTRUCTION IN THE TECHNICAL SCHOOL

Introductory Course

English, mathematics, drawing, experimental science, manual instruction, domestic economy.

Commercial Subjects :

Shorthand, book-keeping, business methods, and routine, type-writing, commercial correspondence, commercial English, commercial arithmetic, penmanship, commercial geography, banking and currency, economics of industry and commerce commercial law.

Languages :

French, German.

Mathematics :

Pure mathematics, practical mathematics, practical plane and solid geometry.

Science (Pure and Applied) :

Machine construction and drawing, building construction and drawing, applied mechanics, steam, carpentry and joinery, engineering, workshop practice, mechanical engineering, textile (linen weaving), experimental science, chemistry, magnetism and electricity, electrical engineering, tailors' cutting, painters' and decorators' work.

Handicraft :

Manual training in wood and metal.

Domestic Science :

Cookery, laundry-work, housewifery, domestic economy, plain and fancy needlework, making of simple garments, dressmaking, renovations, millinery.

Art Subjects :

Freehand, model, blackboard and geometrical drawing, drawing in light and shade, drawing of common objects, design, perspective, painting.

III. DAY TRADES PREPARATORY SCHOOL.

The Day Trades Preparatory school will be conducted at the Technical School, Portadown. The aim of this school will be to provide for boys over the age of thirteen, who have received an education equivalent to

that of the Sixth Standard of a National School such a course of training as will fit them to enter upon an industrial career.

The course of instruction shall extend over a period of three years, and will include experimental science, drawing, workshop mathematic., manual instruction, practical geometry, and literary subjects, including one modern language besides English.

The Department will bear three-fourths of the approved net annual cost of maintaining the school. The proportion of the expenses admitted for payment by the Department may be increased by one-tenth if, in the opinion of the Department's Inspectors, the organisation and teaching merit special recognition, or it may be reduced by one or more tenths if the organisation or teaching is, in the opinion of the Department's Inspectors, unsatisfactory.

VI. GENERAL CONDITIONS.

(See Section VI., Scheme for Co. Clare.)

URBAN DISTRICT OF RATHMINES AND RATHGAR.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1912, to 31st July, 1913.

Chief Industries.

Commercial pursuits, laundry-work.

Population, 37,840. Valuation, £173,712. Value of 1d. rate, £724.

The local contribution from rates will be paid over to the Committee before the close of the financial year ending 31st March, 1913.

Technical Instruction Committee.

The Committee was appointed on the 23rd January, 1911, and will cease to hold office on the 23rd January, 1914. It consists of fifteen members, of whom nine are Urban District Councillors, and six added members.

Objects of the Scheme.

The objects of the Scheme are to provide instruction in commercial subjects by means of a School of Commerce, and in Domestic Economy, Subjects by means of a School of Domestic Training.

Premises.

The School of Commerce is situated at 24 Rathmines Road, Dublin and contains ten class-rooms.

The School of Domestic Economy is situated at 52a Upper Rathmines, and contains one class-room.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Subjects of Instruction.
- III. General Conditions.

I. FINANCE.

A. Estimated Income :

1. SCHOOL OF COMMERCE.

- | | |
|---|------------|
| (1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the Financial year ending 31st March, 1913) | £766 |
| (2) Contributions from the Department :— | |
| (i) From Endowment | £1,000 |
| Less amount equal to one-half of grant earned under Section II. (b) of the Programme for Technical Schools, etc. (see below) | 10 |
| | <hr/> £990 |

(ii) Grants under Programme for Technical Schools, etc.

(a) Under Section II. (a) ..	£450
(b) Under Section II. (b) ..	20

			470	
				£1,460
(3) Students' Fees				200

2. SCHOOL OF DOMESTIC ECONOMY.

(1) Contributions from the Department:—

(i) From Endowment	£250
(ii) Grants under the Programme for Technical Schools, etc. ..	50

				300
(2) Students' Fees and Sales				120
Total				£2,846

B. Estimated Expenditure :

1. SCHOOL OF COMMERCE.

(1) Salary of Principal	£424
(2) Salaries of other Teachers	1,116
(3) Examinations	60
(4) Caretaker's Wages	52
(5) Fuel, Light and Cleaning	76
(6) Rent and Insurance	83
(7) Equipment, including Additions to Library	125
(8) Reserved for Charges against New Buildings	250
(9) Class Materials	5
(10) Repairs to Premises	10
11) Administrative and incidental Expenses:—	
(a) Secretary's Salary	£50
(b) Clerical Assistance	35
(c) Office Expenses	10
(d) Deputation Expenses	10
(e) Printing, Stationery and Advertising	100
(f) Sundries	20
	225

Total £2,426

2. SCHOOL OF DOMESTIC ECONOMY.

(1) Salary of Chief Instructress	110
(2) Salary of Assistant Instructress	65
(3) Caretaker's Wages	55
(4) Fuel, Light and Cleaning	25
(5) Rent and Insurance	40
(6) Equipment	40
(7) Class Materials	45
(8) Printing, Stationery and Advertising	40
	420
Total	£2,846

II. SUBJECTS OF INSTRUCTION.

(1) SCHOOL OF COMMERCE.

Introductory Course :

English, mathematics and drawing.

Commercial Subjects :

English, Shorthand, typewriting, book-keeping, business methods, commercial arithmetic.

Languages :

French, German.

Mathematics :

Advanced arithmetic and algebra.

Higher Commercial Subjects :

Advanced book-keeping and accountancy, company procedure and accounts, auditing, economics, commercial geography, commercial law, practical banking and finance, merchandise traffic and station accounts, audit office work, coaching traffic, railway signalling and block working, work of railway chief offices, railway economics and geography, railways, and the State, building construction and plan drawing, fire insurance theory and practice including the law of fire insurance, life assurance theory practice and law, accident insurance practice and law.

(2) SCHOOL OF DOMESTIC ECONOMY.

Cookery, laundry-work, dressmaking and needlework, housewifery, hygiene and sick nursing.

III GENERAL CONDITIONS

(See Section VI., Scheme for County Clare).

**CONDITIONS OF AWARD OF SCHOLARSHIPS OFFERED FOR
COMPETITION BY THE DEPARTMENT.**

Form S. 2.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
UPPER MERRION STREET, DUBLIN.

METROPOLITAN SCHOOL OF ART, DUBLIN.

TEACHERSHIPS-IN-TRAINING, 1913.

The Department will offer for competition, at the beginning of the Session 1913-14, three Teacherships-in-Training tenable at the Metropolitan School of Art, Dublin. One will be open to competition amongst male candidates only, and one amongst female candidates only; the third will be open to competition amongst both male and female candidates.

The object of the Teacherships-in-Training is to encourage capable Art students to undertake such a course of training as will enable them to become Art Teachers.

The Teacherships-in-Training will entitle the holders to free admission to all the day and evening classes at the Metropolitan School of Art for the Session 1913-14; a maintenance allowance of 21s. per week during the Session (about forty weeks); and third-class railway fare for one journey to and from Dublin.

The Teacherships will be awarded partly as the result of an examination, and partly for works submitted according to the conditions stated below.

The examination will be confined to Art subjects, and will be held at the Metropolitan School of Art, Dublin, on Tuesday, Wednesday, and Thursday, the 24th, 25th, and 26th June, 1913.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Candidates who have held Scholarships at the Metropolitan School of Art extending over more than one School Session will not be eligible for the award of Teacherships-in-Training.

Teacherships will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Metropolitan School of Art, and in particular, candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible. In awarding the Teacherships preference will be given to candidates who possess the Art Class Teachers' Certificate (Board of Education), or the Irish Secondary Teachers' Honours Drawing Certificate.

The award will be made on the following conditions :—

(1.) Candidates must be not less than eighteen and not more than thirty years of age on the 1st September, 1913. The Department may allow a modification of this rule in special cases.

(2.) Successful candidates will be required to furnish a medical certificate of health, an authenticated copy of certificate of birth, and satisfactory testimonials from two responsible persons.

(3.) Candidates must satisfy the Department that they have had a good general education.

(4.) Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st September, 1913.

(5.) Successful candidates will be required to prepare, in conjunction with the Headmaster of the School, a scheme of study; and to submit it for the Department's approval. They will be required to devote their whole time to the work of this scheme; to attend regularly and punctually, and generally to comply with the regulations set out in the programme of the Metropolitan School of Art. They must be prepared, if required, as part of their training, to undertake such work as teachers as the Headmaster may prescribe.

(6.) The Teacherships may be renewed for a second Session. Renewal will depend upon the ability and application shown by the student during the previous Session, and on the scheme of study proposed by the student when applying for a renewal for a second Session.

(7.) The Department reserve the right at any time to determine, without notice, any Teachership upon being satisfied that its continuance is for any reason undesirable.

(8.) The decision of the Department in all questions arising in connection with Teacherships shall be final.

(9.) The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

Applications for admission to the competition must be forwarded, on Form S. 3, so as to reach the Offices of the Department not later than the 30th April, 1913. Applications for forms are not regarded as applications for admission to the examination. Only those candidates who present an official card of admission will be admitted to the examination room.

Copies of Form S. 3 may be obtained, after 1st February, 1913, upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin, or to the Registrar, Metropolitan School of Art, Kildare Street, Dublin.

SUBJECTS OF EXAMINATION.

The subjects and time-table of the examination will be :—

First Day, Tuesday, June 24th—

10 a.m. to 2 p.m.—Drawing of a Figure from the Antique. 100 marks.

3 to 5.30 p.m.—Object Drawing. (50 marks.)

Second Day, Wednesday, June 25th—

10 a.m. to 1 p.m.—Drawing from a Cast. (50 marks.)

2 to 6 p.m.—Design (Drawn or Modelled). (100 marks.)

Third Day, Thursday, June 26th.—

11 a.m. to 1.30 p.m.—Principles of Ornament. (100 marks).

2.30 to 4.30 p.m.—History of Art, having special reference to the craft for which the exercises in Design have been worked. (50 marks).

4.45 to 5.45 p.m.—Drawing on the Blackboard. (50 marks.)

FINISHED STUDIES.

In order to encourage Art students to devote attention to what should be the primary aim of their higher instruction, namely, the application of their skill, experience, and good taste to finished studies requiring more time and care than the ordinary conditions of an examination room permit, marks, to a maximum of 225, will be awarded for *four* works of a similar character to those proposed for the Art Teachers' Certificate. (See Form S. 240).

Works to be submitted for the competition must be delivered at the Metropolitan School of Art, Dublin, on or before Saturday, the 21st June, 1913. They should be addressed, "The Registrar, Metropolitan School of Art, Dublin," and should be specially marked, "Works, Teacherships-in-Training."

Form S. 33.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND
UPPER MERRION STREET, DUBLIN.

ROYAL COLLEGE OF SCIENCE, DUBLIN.

SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS, 1913.

A limited number of Scholarships and of Teacherships-in-Training, tenable at the Royal College of Science, Dublin, will be offered for competition among Students of Science and Technology in 1913.

The Scholarships are of the value of £50 per annum and, in addition, entitle the holder to free instruction during the Associate Course, and third-class railway fare for one journey each session to and from Dublin.

A Teachership-in-Training entitles the holder to free instruction during the Associate Course, a maintenance allowance of 21s. per week for the session of about forty weeks each year, and third-class railway fare for one journey each session to and from Dublin.

The Associate Course extends over four years, and the College Session lasts from the beginning of October until the end of June each year.

Candidates awarded Teacherships-in-Training will be required to enter into an undertaking that they will pursue the full Associate Course, with a view to becoming Teachers of Science in Ireland, and that, in the event of their leaving the College before obtaining the Diploma of Associateship, they will refund to the Department the sums paid to them as maintenance allowances and expenses of travelling.

Holders of Scholarships and Teacherships-in-Training who may seek leave of absence from attendance at the College in order to attend examinations for Scholarships in other Institutions, will be required to pay first the College Fee for the current term.

Holders of Scholarships and Teacherships-in-Training will be required to devote their whole time to the work of the Associate Course, to comply with the Regulations of the College, and to pass the examinations required for the Associateship. The continuance of the Scholarship or Teachership-in-Training from session to session will depend upon the ability and application which the Student has shown during the previous session or sessions at the College.

Candidates for Scholarships and Teacherships-in-Training must be not less than sixteen nor more than thirty years of age on the 1st June, 1913. Holders of Royal Scholarships (or, under former regulations, Royal Exhibitions or National Scholarships), awarded by the Board of Education, London, and present or past Associate Students of the Royal College of Science, are ineligible as candidates.

Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st June, 1913.

Candidates will have to satisfy the Department as to their knowledge of English and of one other language (Greek, Latin, Irish, French, or German). In these subjects a pass in the Middle Grade of the Intermediate Education Board's Examinations, or the equivalent of this, will be accepted as satisfactory. Those candidates who cannot thus satisfy the Department as to their knowledge of the qualifying subjects will be examined in the following syllabuses:—

English—Grammar and Composition.—The paper set will include an Essay and questions of a general nature on English literature.

Language other than English.—The paper set will include passages of moderate difficulty for translation from and into the language selected, and also questions on grammar.

The competition will be confined to Mathematics, Experimental Science, and Drawing.

The Syllabus in Mathematics will be the Honours Courses in Arithmetic and Algebra, Geometry, and Trigonometry for the Senior Grade of the Intermediate Education Board's Examinations of 1913.

In Experimental Science, candidates will be allowed the choice of one of the following subjects of the Special Courses of Experimental Science of the Department's Programme for Day Secondary Schools:—Physics, Chemistry, Mechanics, Botany, Physiology and Hygiene, Physical and Commercial Geography. The papers set may, however, include questions on the work of the Two Year Preliminary Course.

The Syllabus in Drawing will be the First and Second Year Syllabuses of the Programme for Day Secondary Schools.

NOTE.—Text Books, other than those referred to in the Syllabuses, are not prescribed for the examinations.

The examination will be held in Dublin on the days and at the hours shown below:—

Tuesday, 24th June.—Greek, Latin, Irish, French or German, 2 p.m. to 5 p.m.

Wednesday, 25th June.—Mathematics (First Paper), 10 a.m. to 1 p.m.; Experimental Science (Written Examination), 2 p.m. to 5 p.m.

Thursday, 26th June.—Mathematics (Second Paper), 10 a.m. to 1 p.m.; Experimental Science (Practical Examination), 2 p.m. to 5 p.m.

Friday, 27th June.—Drawing, 10 a.m. to 1.10 p.m.; English, 2 p.m. to 5 p.m.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Scholarships or Teacherships-in-Training will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Royal College of Science. Candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible for Teacherships-in-Training.

Successful candidates will be required to furnish a Medical Certificate of Health, an authenticated copy of Certificate of Birth, and satisfactory testimonials from two responsible persons.

The Department reserve the right at any time to determine without notice a Scholarship or Teachership-in-Training, upon being satisfied that its continuance is for any reason undesirable.

The decision of the Department in all questions arising in connection with the Scholarships and Teacherships-in-Training shall be final.

The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

Applications for admission to the examination must be made not later than the 30th April, on Form S. 34, copies of which may be obtained upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin, or to the Registrar, Royal College of Science, Upper Merrion Street, Dublin.

Applications received after the 30th April will be too late for consideration. Applications for Forms are not regarded as applications for admission to the examination. Only those candidates who present an official card of admission will be permitted to attend the examination.

Under Revision.

Form S. 190.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

INDUSTRIAL SCHOLARSHIPS, 1910.

The Department will, in August, 1910, award not more than six Industrial Scholarships to persons engaged in industries, such as the Woollen, Linen, Leather, and Tanning industries.

The object of these Scholarships is to enable selected persons, who must already have been engaged in one of the higher branches of the industry, to take a full course of instruction in an institution providing special courses of an approved character, with a view to training them for the management of such an industry. Candidates will be required to show that there is a reasonable expectation of their being able to find suitable employment in the industry in Ireland after the termination of their Scholarships.

The Scholarships will be tenable at some higher institution, to be approved by the Department, in which the industry, and the principles underlying it, are taught. They will be of the value of £80 each, and may be renewed for a second or a third year at the discretion of the Department.

The Scholarship holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st July, 1910.

Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates, or to any other question arising out of these Scholarships, will be final.

Candidates must fill in and return, addressed to the Secretary of the Department, not later than the 30th June, 1910, Form S. 191, copies of which may be had on application.

Under Revision.

Form S. 194.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

COMMERCIAL SCHOLARSHIPS, 1912.

The Department will, in September, 1912, award a limited number of Commercial Scholarships (not more than six) to young men who have had a sound general education, and some commercial experience.

The object of the Scholarships is to afford facilities for the Holders to obtain training in some higher Institution, approved by the Department, with a view to their employment as teachers of Commercial Subjects in Ireland.

The Scholarships are of the value of £100 per annum each, and are tenable for two years. The Department, however, reserve the right to determine a Scholarship at any time within this period upon being satisfied that its continuance is for any reason undesirable.

The Scholarship-holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must be at least twenty-one years of age on the 1st September, 1910, and must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st September, 1912.

Successful candidates will be required to enter into an undertaking that they will engage in the teaching of Commercial subjects after the termination of their Scholarships.

Certificates of good character will be required from all applicants, and candidates selected for Scholarships will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates or to any other question arising out of these Scholarships, will be final.

Candidates must fill in Form S. 195, and return it to the Secretary of the Department not later than the 31st August, 1912. Copies of this Form may be had on application.

Under Revision.

Form S. 196.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

TRAINING OF TEACHERS OF CROCHET-WORK AND SPRIGGING.

The Department will, in September, 1912, award not more than three Scholarships, tenable at the Training School for Lace and Sprigging Teachers, Enniskillen, to girls having a satisfactory general education, and some proficiency in Crochet-work or Sprigging.

These Scholarships are granted to enable the holders to secure training as teachers of Crochet-work or Sprigging.

The Scholarships will be of the value of £25 each, and will be tenable for one year. The Department reserve the right to determine a Scholarship at any time upon being satisfied that its continuance is for any reason undesirable.

Each candidate for a Scholarship will be required to submit to the Department, with the form of application, specimens of her work in either Crochet-work or Sprigging.

Should the work submitted be regarded as of a satisfactory standard, the candidate will be admitted to an examination which will consist of simple tests in English, Arithmetic, Drawing, and Crochet-work or Sprigging.

The Scholarship will be awarded as a result of the examination. (Not more than one Scholarship will be awarded in the case of candidates from any one County.)

The examination will be held at the Metropolitan School of Art, Dublin, and at the Technical School, Enniskillen, on the following dates :—

Dublin : Crochet-work or Sprigging, on Tuesday, 10th September.

English, Arithmetic and Drawing, on Wednesday, 11th September.

Enniskillen : English, Arithmetic and Drawing, on Wednesday, 11th September.

Crochet-work or Sprigging, on Thursday, 12th September.

Candidates will be required to defray their own expenses in attending the examination.

Candidates must be at least 20 years of age on the 1st September, 1912, and must have been born in Ireland or have resided in the country for three years immediately preceding that date.

Two certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates or to any other question arising out of these Scholarships will be final.

Applicants must fill in and return, addressed to the Secretary of the Department, Form S. 197, copies of which may be had on application, together with specimens of work in Crochet or Sprigging. (Two specimens of finished work, and two specimens of work in progress should be furnished).

Only those applications received at the Offices of the Department by Thursday, August 22nd, 1912, will be taken into consideration.

RESULTS OF COMPETITIONS FOR SCHOLARSHIPS OFFERED BY THE DEPARTMENT DURING 1912.

SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS AND TEACHER SHIPS-IN-TRAINING.

At the annual examination held on the 25th, 26th, 27th and 28th June, 1912, for Science and Technological Scholarships and Teacherships-in-Training, tenable at the Royal College of Science, Dublin, thirty candidates presented themselves.

Five Scholarships and five Teacherships-in-Training were offered for competition, and these were awarded to the following candidates, whose names are given in order of merit:—

Scholarships.

Mr. Patrick O'Callaghan, Christian Brothers' Schools, Cork.
Mr. Dan O'Brien, Christian Brothers' Schools, Cork.
Mr. James Ryan, Christian Brothers' Schools, Cork.
Mr. Denis Madden, Christian Brothers' Schools, Cork.
Mr. George K. Best, Mountjoy School, Dublin.

Teacherships-in-Training.

Mr. George Lodge, Christian Brothers' College, Waterpark, Waterford.
Mr. Samuel H. Cross, Royal School, Dungannon.
Mr. James C. Greer, Royal School, Dungannon.
Mr. Jeffrey O'Connell, Christian Brothers' Schools, Synge Street, Dublin.
Miss Alexandra M. Harper, Royal School, Dungannon.

INDUSTRIAL SCHOLARSHIPS.

There were no new Industrial Scholarships offered for competition in 1912. The Scholarships in Woollen Manufacture awarded to Mr. Henry K. C. Weir in 1910, was renewed for the Session 1912-13.

The Scholarship in Linen Manufacture, awarded to Mr. Charles H. Leland in 1910, was renewed for the Session 1912-13.

The Scholarship in Woollen Manufacture is being held at the Leeds University; the Scholarship in Linen Manufacture is being held at the Municipal School of Technology, Manchester.

COMMERCIAL SCHOLARSHIPS.

For the Scholarships offered for competition in 1912, there were one hundred and twenty-two applicants. Scholarships are being held at the London School of Economics and Political Science (University of London), by the following :—

Mr. E. P. Brazil, of Cork.
 Mr. M. B. Browne, of Ballinasloe.
 Mr. P. A. Earle, of Enniscorthy.
 Mr. J. J. O'Brien, of Tipperary.

A Scholarship was also awarded to Mr. J. F. Burke, of Cork, who has been permitted by the Department to complete his studies at Cork for the Bachelor of Commerce Degree of the National University of Ireland, before taking up the Scholarship.

The Scholarships awarded in 1910 to Messrs. Timothy J. M'Cormack, and John McGuigan, and held during the Session 1910-11, have been renewed for the Session 1912-13. Messrs. M'Cormack and McGuigan have been temporarily employed as teachers of Commercial subjects during the Session 1911-12.

SCHOLARSHIPS IN CROCHET-WORK AND SPRIGGING.

Nineteen candidates competed for the three Scholarships offered for the purpose of training Teachers of Crochet-work and Sprigging, which were awarded as follows :—

Scholarships in Crochet-Work.

Miss Ellen McHugh, of Manorhamilton, Co. Leitrim.

Scholarships in Sprigging.

Miss Brigid C. Keenan, of Belleek, Co. Fermanagh.

Miss Mary Sharkey, of Sligo.

The Scholarships are tenable for one year at the Training School for Lace and Sprigging Teachers, Enniskillen.

TABLE I.

Table showing by COUNTIES the AMOUNTS ALLOCATED from the DEPARTMENT'S ENDOWMENT and from LOCAL RATES for the purpose of TECHNICAL INSTRUCTION in NON-AGRICULTURAL SUBJECTS. ACADEMIC YEAR, 1st August, 1911, to 31st July, 1912.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
LEINSTER.				
COUNTY CARLOW: Carlow Urban District,	915 8 3	620 0 0	—	295 8 3
COUNTY DUBLIN: Blackrock Urban District,	740 0 0	430 0 0	—	310 0 0
Blackrock Urban District,	687 0 0	500 0 0	—	187 0 0
Kingsdown " "	1,450 0 0	850 0 0	—	600 0 0
Pembroke " "	2,543 0 0	1,250 0 0	200 0 0	1,093 0 0
Rathmines and Rathgar Urban District,	2,009 0 0	1,250 0 0	—	759 0 0
DUBLIN COUNTY BOROUGH:	12,806 18 2	10,206 18 2	—	2,600 0 0
COUNTY KILDARE: Athy Urban District,	1,118 8 0	500 0 0	100 0 0	518 8 0
Naa " "				
COUNTY KILKENNY: Kilkenny Urban District,	1,440 0 0	820 0 0	—	620 0 0
KING'S COUNTY: Birr Urban District,	919 13 4	550 0 0	—	369 13 4
Tullamore " "				
COUNTY LONGFORD: Granard Urban District,	549 15 8	410 0 0	—	139 15 8
Longford " "				
COUNTY LOUTH: Dundalk Urban District,	934 0 0	710 0 0	—	224 0 0
Drogheda " "	700 0 0	600 0 0	—	100 0 0
COUNTY MEATH: Kells Urban District,	850 0 0	500 0 0	—	350 0 0
Navan " "				
Trim " "				
QUEEN'S COUNTY:	950 0 0	460 0 0	—	490 0 0
COUNTY WESTMEATH: Athlone Urban District,	776 0 0	450 0 0	—	326 0 0
Athlone Urban District,	450 0 0	400 0 0	—	50 0 0
COUNTY WEXFORD: Enniscorthy Urban District,	990 0 0	350 0 0	—	640 0 0
Enniscorthy Urban District,	324 0 0	290 0 0	—	34 0 0
New Ross " "	333 3 7	200 0 0	100 0 0	33 3 7
Wexford " "	677 12 2	600 0 0	—	77 12 2
COUNTY WICKLOW: Arklow Urban District,	871 3 4	550 0 0	—	321 3 4
Wicklow " "				
Bray " "	620 0 0	400 0 0	—	220 0 0
Totals for Leinster,	33,465 3 0	21,896 18 2	400 0 0	11,168 4 19

(*) Contributions for the financial year ended 31st March, 1912.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
MUNSTER.				
COUNTY CLARE: Ennis Urban District, Kilrush " }	847 14 1	550 0 0	—	297 14 1
COUNTY CORK: Cork City Urban District, Ferry " " Kinsale " " Macroom " " Mallow " " Midleton " " Skibbereen " " Youghal " "	4,499 13 1	2,125 0 0	—	2,374 13 1
Queenstown " . . .	467 0 0	375 0 0	—	92 0 0
CORK COUNTY BOROUGH: . . .	3,131 12 3	2,411 8 3	—	619 4 0
COUNTY KERRY: Kilbarney Urban District, Listowel " }	1,152 9 7	700 0 0	—	452 9 7
Trillick " . . .	618 4 6	525 0 0	30 0 0	63 4 6
COUNTY LIMERICK: . . .	645 0 0	430 0 0	—	215 0 0
LIMERICK COUNTY BOROUGH: . . .	1,502 17 6	1,208 11 2	—	294 6 4
COUNTY TIPPERARY (NORTH Riding): Nenagh Urban District, Templemore " " Thurles " "	977 17 0	660 0 0	—	317 17 0
COUNTY TIPPERARY (SOUTH Riding): Carrick-on-Suir Urban District, Cashel " "	880 17 5	480 0 0	—	400 17 5
Clonmel " . . .	604 8 0	525 0 0	—	79 8 0
Tipperary Joint Urban and Rural District, . . .	721 7 11	450 0 0	—	271 7 11
COUNTY WATERFORD: Dungarvan Urban District, }	1,074 8 2	500 0 0	—	574 8 2
WATERFORD COUNTY BOROUGH: . . .	1,024 0 3	847 19 11	—	176 0 4
Totals for Munster, . . .	18,147 9 9	11,727 19 4	30 0 0	6,329 10 5

(a) Contributions for the financial year ended 31st March, 1912.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
ULSTER.				
COUNTY ANTRIM:				
Ballyclare Urban District,	1,146 8 0	530 0 0	150 0 0	406 8 0
Portrush „				
Ballymena „	640 0 0	520 0 0	—	130 0 0
Ballymoney Joint Urban and Rural District,	324 10 0	210 0 0	—	114 10 0
Carrickfergus Urban District, Large „	253 18 3	215 0 0	—	38 18 3
	435 8 6	300 0 0	—	135 8 6
BELFAST COUNTY BOROUGH:	17,124 5 4	(a) 11,061 8 4	—	6,062 17 0
COUNTY ARMAUGH:				
Armagh Urban District,	400 0 0	220 0 0	—	180 0 0
Lurgan „	437 1 6	350 0 0	—	87 1 6
Portadown „	709 13 5	(b) 600 0 0	—	109 13 5
	610 0 0	500 0 0	—	110 0 0
COUNTY CAVAN:				
Belturbet Urban District, Cavan „	787 19 5	450 0 0	—	307 19 5
Cootehill „				
CO. DUBLIN:				
Letterkenny Urban District,	733 3 4	416 0 0	—	317 3 4
COUNTY DOWN:				
Banbridge Urban District	750 0 0	250 0 0	—	400 0 0
Bangor „	300 0 0	250 0 0	—	50 0 0
Drogheda „	405 8 3	250 0 0	—	215 8 3
Holywood „	120 0 0	100 0 0	—	20 0 0
Newry „	253 19 11	200 0 0	—	53 19 11
Newtownards „	740 0 0	600 0 0	—	140 0 0
Warrenpoint „	506 3 3	450 0 0	—	56 3 3
	105 14 6	70 0 0	—	35 14 6
COUNTY FERMANAGH:				
Enniskillen Urban District,	1,059 0 0	400 0 0	250 0 0	409 0 0
COUNTY LONDONDERRY:				
Lisavady Urban District,	908 14 7	514 0 0	—	394 14 7
Coleraine „	505 9 0	400 0 0	—	105 9 0
LONDONDERRY COUNTY BOROUGH:	1,633 14 2	(a) 1,263 14 2	—	(a) 420 0 0
COUNTY MONAGHAN:				
Monaghan Urban District,	737 6 11	425 0 0	—	312 6 11
Castleblayney „				
Carrickmacross „				
Cloghan „				
COUNTY TYRONE:				
Cookstown Urban District,	1,420 19 8	850 0 0	—	570 19 8
Dungannon „				
Omagh „				
Strabane „				
Totals for Ulster,	33,168 9 0	21,525 2 0	400 0 0	11,243 6 6

(a) Contributions for the financial year ended 31st March, 1912.

(b) Includes £100 contribution to separate scheme for girls.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
CONNAUGHT.				
COUNTY GALWAY: }	1,735 2 0	800 0 0	—	935 2 0
Ballinasloe Urban District,				
Gahway " }	1,003 6 10	680 0 0	200 0 0	123 6 10
COUNTY LEITRIM: . . .	600 0 0	300 0 0	100 0 0	200 0 0
COUNTY MAYO:				
Ballina Urban District,				
Castlebar " }	1,174 13 8	750 0 0	—	421 13 8
Westport " }				
COUNTY ROSCOMMON: . .	750 0 0	450 0 0	—	300 0 0
COUNTY SLIGO: . . .	470 0 0	250 0 0	—	220 0 0
Sligo Urban District, . .	640 0 0	550 0 0	—	90 0 0
Totals for Connaught, .	6,373 2 6	3,780 0 0	300 0 0	2,293 2 6
TOTALS FOR LEINSTER, . .	33,465 3 0	21,896 18 2	400 0 0	11,168 4 10
TOTALS FOR MUNSTER, . .	18,147 9 9	11,787 19 4	30 0 0	6,329 10 5
TOTALS FOR ULSTER, . .	33,168 9 0	21,525 2 6	400 0 0	11,243 6 6
TOTALS FOR CONNAUGHT, .	6,373 2 6	3,780 0 0	300 0 0	2,293 2 6
TOTALS FOR IRELAND, . .	91,154 4 3	58,990 0 0	1,130 0 0	31,034 4 3

LIST OF TECHNICAL SCHOOLS AND SCIENCE AND ART SCHOOLS AND CLASSES.
Technical Schools, etc., made by the Department during the
given during the Academic Year, 1st August, 1910—31st July.

School No.	Name of School.	Classes conducted under Section II. of the Programme.						
		Introductory Course.	No. of Students in respect of whom grants were paid.					Grat.
			Specialised Courses.					
			1st yr.	2nd yr.	3rd yr.	4th and subsequent years.	Teachers attending Ordinary Courses.	
LEINSTER.								
7008	Co. DUBLIN : Ballsbridge : Royal Veterinary College of Ireland.	—	137	—	—	—	—	2 s. d. 414 10 8
6611	Ballsbridge : Technical School.	—	45	13	4	4	1	50 6 10
6248	Blackrock : Municipal Technical School.	14	43	17	3	2	4	156 5 4
6607	Cabra : St. Mary's Dominican Convent.	—	—	—	—	—	—	—
6163	Kingsdown : Municipal Technical School.	20	91	44	18	6	15	424 7 4
6936	Rathmines : School of Domestic Economy.	—	63	17	—	—	—	60 13 1
6498	Rathmines : School of Commerce.	43	167	50	7	3	17	534 12 1
6041	Ringsend : Pembroke Technical School.	6	106	34	6	—	—	269 5 1
Co. BOROUGH OF DUBLIN :								
6143	Christian Brothers' Novitiate, Marino.	—	—	—	—	—	—	—
7017	Dental School of the Incorporated Dental Hospital for Ireland.	—	38	—	—	—	—	148 15 1
7018	Leinster College of Irish.	—	—	—	—	—	—	—
7013	Schools of Surgery, Royal College of Surgeons	—	162	—	—	—	—	460 3 1
Co. KILDARE :								
6795	Athy : Technical School.	—	4	1	1	—	1	3 14 1
6442	Naas : Technical School.	—	3	—	—	—	—	1 4 1
Co. KILKENNY :								
6607	Kilkenny : City Technical School.	4	19	10	3	1	2	70 27 5
KING'S COUNTY :								
6509	Birr : Technical School.	1	7	1	—	—	4	15 22 4
6598	Tullamore : Technical School.	12	11	12	—	—	7	32 36 2
Co. LOUTH :								
6416	Drogheda : Municipal Technical School.	2	45	22	8	5	20	250 1 8
6415	Dundalk : Municipal Technical School.	15	77	21	2	1	5	211 35 2
Co. MEATH :								
6924	Navan : Technical School.	7	28	7	5	—	—	49 9 3
QUEEN'S COUNTY :								
6917	Maryborough : Technical School.	5	31	7	—	1	—	35 3 1
Co. WESTMEATH :								
6576	Athlone : Technical School.	1	27	—	—	—	3	26 2 3
6596	Mullingar : Technical School.	1	17	2	1	—	—	22 4 5
Co. WEXFORD :								
6420	Enniscorthy : Technical School.	5	26	1	1	—	—	28 5 3
6790	New Ross : Technical School.	1	29	—	—	—	8	35 4 4
6347	Wexford : Municipal Technical School.	3	20	4	2	2	18	56 13 10
Co. WICKLOW :								
6697	Arklow : Technical School.	3	11	3	3	1	—	33 5 5
6457	Bray : Technical School.	4	11	11	3	—	—	45 12 1
6702	Wicklow : Technical School.	7	11	8	1	—	3	37 14 1
—	TOTALS FOR LEINSTER.	157	1,240	285	68	26	116	3,468 8 4
MUNSTER.								
Co. CORK :								
6761	Ballyvonnare : Technical School.	—	—	—	8	—	—	19 19 3
6608	Bandon : Technical School.	—	2	3	1	2	5	22 4 10
6705	Bantry : Technical School.	—	3	—	—	—	6	6 14 8
6922	Buttervant : Technical School.	—	4	—	—	—	4	4 4 4

II.

showing the Grants under the conditions of the Programme for Financial Year, 1st April, 1911—31st March, 1912, in respect of Instruction 1911.

Teachers' Classes conducted under Section III. of the Programme.		Classes conducted under other Sections of the Programme.			Total.		School No.
No. of Students.	Grant.	Section of Programme under which conducted.	No. of Students.	Grant.	Total No. of Students in respect of whom grants were paid.	Total Grant.	
	£ s. d.			£ s. d.		£ s. d.	
—	—	—	—	—	137	414 10 0	7008
8	11 17 6	—	—	—	75	70 13 4	6611
4	22 15 5	—	—	—	86	156 2 8	6248
22	41 5 0	—	—	—	4	22 15 5	6007
—	—	—	—	—	216	465 12 7	6163
—	—	—	—	—	84	69 18 7	6856
—	—	—	—	—	307	534 13 3	6408
—	—	—	—	—	152	259 5 1	6041
62	146 3 6	VI.	91	61 6 0	153	210 9 6	6143
—	—	—	—	—	38	149 16 6	7017
73	141 4 10	—	—	—	73	141 4 10	7018
—	—	—	—	—	162	460 3 2	7013
—	—	—	—	—	7	3 14 2	6795
—	—	—	—	—	3	1 8 8	6442
8	26 4 0	—	—	—	47	97 1 6	6607
—	—	IV.	8	12 8 7	21	28 1 1	6569
—	—	IV.	5	10 19 0	47	43 15 3	6508
—	—	—	—	—	102	250 1 9	6416
34	56 3 6	—	—	—	158	268 1 8	6415
—	—	—	—	—	47	49 2 3	6924
—	—	—	—	—	44	35 3 3	6917
—	—	—	—	—	31	28 2 9	6676
—	—	—	—	—	21	22 5 2	6806
—	—	—	—	—	33	28 2 8	6620
—	—	—	—	—	29	35 4 8	6790
—	—	—	—	—	49	50 10 10	6347
—	—	—	—	—	21	31 5 0	6697
—	—	—	—	—	29	45 11 3	6457
—	—	—	—	—	30	37 15 8	6702
211	445 13 9	—	104	87 13 7	2,206	4,001 17 0	—
—	—	—	—	—	8	19 19 3	6761
—	—	—	—	—	13	22 4 10	6603
—	—	—	—	—	9	6 14 8	6706
—	—	—	—	—	8	4 6 4	6922

TABLE II.—LIST OF TECHNICAL SCHOOLS AND SCIENCE

		Classes conducted under Section II. of the Programme.						
School No.	Name of School.	No. of Students in respect of whom grants were paid.						Grant
		Introductory Course.	Specialised Courses.				Teachers attending (not every year).	
			1st yr.	2nd yr.	3rd yr.	4th and subsequent years.		
MUNSTER con.—Co. CORK.—con.								
6700	Charleville: Technical School,	—	1	—	—	—	—	2 4 4
6667	Clonakilty: Technical School,	8	2	—	1	—	7	4 7 4
6671	Doneraile: Technical School,	—	1	3	3	—	1	20 5 4
6664	Dunsmurray: Convent of Charity, St. Mary's	—	7	3	—	—	—	17 11 4
6751	Fernoy: Technical School,	—	20	3	2	4	10	12 15 20
6621	Kanturk: Technical School,	—	2	—	—	—	—	146 8 4
6615	Kinsale: Technical School,	—	1	—	—	—	3	6 13 4
6659	Macroom: Technical School,	—	7	5	2	—	9	28 4 1
4884	Mallow: Technical School,	—	1	—	—	—	—	28 4 1
6766	Midleton: Technical School,	—	13	2	2	—	3	6 13 1
4956	Millstreet: Drishane Convent of Mercy,	—	—	—	—	—	—	10 14 1
6658	Millstreet: Technical School,	—	—	—	—	—	1	6 2 4
4763	Mitchelstown: Technical School,]	—	3	—	—	—	—	6 8 20
6019	Passage West: Technical School,	—	7	3	2	—	—	28 4 1
6664	Queenstown: Technical School,	—	30	18	13	5	4	207 13 4
6752	Ringskiddy: Technical School,	—	7	4	4	—	—	64 12 1
6662	Skibbereen: Technical School,	—	7	4	—	—	4	10 10 1
6610	Youghal: Technical School,	—	12	6	1	1	4	51 12 1
Co. BOROUGH OF CORK:								
6013	Christian Brothers' Schools, Our Lady's Mount,	—	—	—	—	—	—	—
6003A	Crawford Municipal School of Art,	—	—	—	—	—	—	—
6003B	Crawford Municipal Technical Institute,	—	69	10	2	3	17	351 4 4
6653	Municipal School of Commerce,	120	169	53	8	—	8	723 13 1
6603	Presentation Brothers' Training College,	—	—	—	—	—	—	—
6624	St. Vincent's Convent School,	—	11	4	6	—	—	27 2 1
Co. KERRY:								
6714	Dingle: Technical School,	—	1	—	—	—	1	1 10 1
6680	Killarney: Technical School,	—	6	2	—	—	5	23 10 1
6678	Listowel: Technical School,	—	3	1	—	—	—	13 3 1
6671	Trillick: Central Technical School,	17	57	7	8	3	10	183 2 1
Co. BOROUGH OF LIMERICK:								
6030	Municipal Science, Art and Technical Schools	38	111	28	18	7	6	425 5 10
6981	Municipal School of Commerce,	—	70	27	4	1	—	194 13 10
Co. TIPPERARY:								
6862	Carrick-on-Suir: Technical School,	—	5	3	2	—	—	25 8 4
6882	Cushel: Technical School,	—	2	3	—	—	—	8 13 1
6556	Chonnel: Technical School,	1	34	18	2	5	—	127 15 5
6252	Emly: Glovemaking School,	—	—	—	—	—	—	—
6789	Nenagh: Technical School,	—	4	—	—	—	—	5 12 11
6396	Roscrea: Technical School,	18	8	11	3	—	4	145 14 1
6360	Templemore: Technical School,	11	—	—	—	—	1	29 11 1
6143	Thurles: Presentation Convent,	—	11	4	1	2	7	51 17 1
6787	Thurles: Technical School,	—	3	—	—	—	—	2 15 8
6696	Tipperary: Technical School,	11	34	19	2	—	—	90 12 7
Co. WATERFORD:								
6509	Dunscarvan: Technical School,	2	2	—	—	1	4	17 1 1
6303	Lismore: Technical School,	—	—	2	1	—	5	6 4 1
6310	Tramore: Technical School,	—	6	—	—	—	6	1 11 8
Co. BOROUGH OF WATERFORD:								
6477	Central Technical Institute,	21	59	18	—	3	10	262 19 1
6118	Christian Brothers' Schools, Mount Zion,	—	—	—	—	—	—	—
6010	De La Salle Training College,	—	—	—	—	—	—	—
6770	Ursuline Convent, Higher School of Domestic Economy,	—	15	—	—	—	—	37 6 6
TOTALS FOR MUNSTER,		247	810	270	96	37	153	3,395 16 4
ULSTER.								
Co. ANTRIM:								
7009	Antrim: Technical School,	8	79	—	—	—	5	150 19 1
7010	Ballyclare: Technical School,	16	100	—	—	—	5	169 2 10
6358	Ballymena: Municipal Technical School,	25	138	44	10	13	43	752 8 9

AND ART SCHOOLS AND CLASSES.—continued.

Teachers' Classes conducted under Section III. of the Programme.		Classes conducted under other Sections of the Programme.			Total.		School No.
No. of Students.	Grant.	Section of Programme under which conducted.	No. of Students.	Grant.	Total No. of Students in respect of whom grants were paid.	Total Grant.	
	£ s. d.			£ s. d.		£ s. d.	
—	—	—	—	—	1	0 7 4	6760
—	—	—	—	—	18	29 5 7	6867
—	—	—	—	—	8	17 11 5	6871
—	—	—	—	—	10	12 16 11	6884
—	—	IV.	13	28 11 2	52	134 14 6	6751
—	—	—	—	—	2	0 13 5	6821
—	—	—	—	—	4	2 4 1	6815
—	—	—	—	—	23	29 5 7	6859
—	—	—	—	—	9	6 15 1	6884
—	—	—	—	—	20	20 14 1	6766
—	—	IV.	23	45 0 0	23	45 0 0	6886
—	—	—	—	—	1	0 3 9	6858
—	—	—	—	—	3	6 8 10	6768
—	—	—	—	—	12	28 4 1	6819
—	—	—	—	—	70	297 5 5	6804
—	—	—	—	—	15	64 15 0	6759
—	—	—	—	—	15	10 18 7	6802
—	—	—	—	—	24	51 13 2	6810
13	23 8 0	—	—	—	13	23 8 0	6813
—	—	V.	417	1,287 10 5	892	2,367 11 9	6803A 6803B (6853)
—	—	VI.	44	32 19 6	44	32 19 6	6868
—	—	—	—	—	91	27 2 1	6834
—	—	—	—	—	2	1 10 9	6714
—	—	—	—	—	13	23 19 10	6880
—	—	—	—	—	4	13 3 8	6878
22	56 11 4	—	—	—	135	239 13 6	6871
40	80 12 6	(IV. V.)	19 167	23 17 6 456 10 3	427	991 6 1	6839
—	—	—	—	—	162	164 19 10	6831
—	—	—	—	—	10	28 0 8	6852
—	—	—	—	—	5	8 19 10	6882
—	—	—	—	—	60	121 15 5	6556
—	—	—	—	—	6	37 10 0	6252
10	25 17 1	IV.	6	37 10 0	6	31 11 0	6789
—	—	—	—	—	42	106 18 3	6306
18	33 9 0	—	—	—	30	54 0 1	6860
—	—	—	—	—	25	81 13 11	6148
—	—	—	—	—	3	2 16 0	6787
—	—	—	—	—	66	90 13 7	6885
—	—	—	—	—	9	17 1 5	6800
—	—	—	—	—	8	5 4 5	6808
—	—	—	—	—	12	1 11 0	6810
14	19 18 9	(IV. V.)	16 41	56 15 11 154 8 1	182	434 1 10	6477
13	19 13 0	VI.	200	398 10 1	13	19 13 0	6118
—	—	—	—	—	200	398 10 1	6426
—	—	—	—	—	15	37 6 6	6776
141	259 9 8	—	939	2,326 12 11	2,693	6,051 18 11	—
—	—	—	—	—	92	120 19 1	7009
—	—	—	—	—	121	169 2 10	7010
46	152 16 0	—	—	—	319	885 1 0	6158

TABLE II.—LIST OF TECHNICAL SCHOOLS AND SCIENCE

School No.	Name of School.	Classes conducted under Section II. of the Programme.						
		No. of Students in respect of whom grants were paid.						Grant.
		Introductory Course.	Specialised Courses.				Teachers attending Ordinary Classes.	
			1st yr.	2nd yr.	3rd yr.	4th and subsequent years.		
ULSTER con.—Co. ANTRIM—con.								
6850	Ballymoney: Technical School,	24	52	43	15	14	30	485 19 14
6845	Carrickfergus: Technical School,	24	50	29	11	6	13	211 12 1
6232	Larne: Technical School,	11	51	28	9	2	13	299 16 2
7011	Portrush: Technical School,	9	53	—	—	—	5	76 9 18
Co. BOROUGH OF BELFAST:								
6227	Municipal Technical Institute,	446	885	353	111	28	175	4,228 11 1
Co. ARMAGH:								
6397	Armagh: Municipal Technical School,	17	64	17	5	2	15	187 1 8
6038	Armagh: Natural History and Philosophical Society's Art Room,	—	2	4	1	—	1	12 17 0
6433	Lurgan: Convent of Our Lady of Mercy,	13	16	11	2	—	4	126 12
6347	Lurgan: Municipal Technical School,	50	34	14	8	1	20	251 17
6574	Portadown: Municipal Technical School,	9	109	16	3	—	19	246 10
Co. DOWY:								
7020	Ballydoogan: Machine Embroidery School,	—	—	—	—	—	—	—
6582	Banbridge: Technical School,	22	25	12	4	—	17	194 17 1
6587	Bangor: Technical School,	4	24	15	6	6	15	159 12 1
6995	Drogheda: Technical School,	7	15	—	—	—	10	32 10 8
6572	Holywood: Technical School,	6	23	7	—	—	—	47 18 10
6544	Newry: Municipal Technical School,	42	35	18	6	4	26	197 1 1
6645	Newtownards: Municipal Technical School,	24	19	12	3	—	16	111 14
6742	Warrenpoint: Municipal Technical School,	3	17	6	—	—	3	33 16 12
Co. FERMANAGH:								
6872	Enniskillen Technical School,	10	4	4	—	—	5	17 12 4
Co. LONDONDERRY:								
6235	Coleraine: Technical School,	9	54	24	9	2	22	237 15 10
6976	Limavady: Technical School,	13	56	16	—	—	4	172 19 1
6963	Magherafelt: Technical School,	26	48	21	1	—	4	180 16 6
Co. BOROUGH OF LONDONDERRY:								
6037	Municipal Technical School,	42	67	25	7	5	44	410 2 10
Co. MONAGHAN:								
6121	Castleblarney: Technical School,	—	14	6	—	—	—	20 15 9
7015	Clones: Technical School,	—	25	—	—	—	2	20 15 4
7016	Monaghan: Technical School,	—	23	—	—	—	—	20 14 16
Co. TIRONE:								
6701	Cookstown: Technical School,	16	36	19	5	1	1	142 19 3
6581	Dungannon: Technical School,	5	12	11	4	1	6	79 9 0
6707	Omagh: Technical School,	12	20	9	2	—	14	82 5 0
6708	Strabane: Technical School,	9	52	16	2	—	2	119 11 5
TOTALS FOR ULSTER,		965	2,184	779	224	85	539	9,549 16 2
CONNAUGHT.								
Co. GALWAY:								
6596	Ballinasloe: Technical School,	8	27	—	—	—	—	32 9 1
6066	Galway: City of Galway Technical Institute,	13	31	6	—	—	4	65 4 12
Co. SLIGO:								
6763	Sligo: Municipal Technical School,	9	49	16	3	3	13	149 1 1
TOTALS FOR CONNAUGHT,		30	107	22	3	3	17	246 6 2
TOTALS FOR LEINSTER (29 Schools),		157	1,240	285	68	26	115	3,468 9 8
TOTALS FOR MUNSTER (51 Schools),		247	816	270	96	37	153	3,295 16 4
TOTALS FOR ULSTER (33 Schools),		965	2,184	779	224	85	539	9,549 16 2
TOTALS FOR CONNAUGHT (3 Schools),		30	107	22	3	3	17	246 6 2
TOTALS FOR IRELAND (116 Schools),		1,339	4,241	1,350	391	151	824	16,551 8 4

AND ART SCHOOLS AND CLASSES.—continued.

Teachers' Classes conducted under Section III. of the Programme.		Classes conducted under other Sections of the Programme.			Total.		School No.
No. of Students.	Grant.	Section of Programme under which conducted.	No. of Students.	Grant.	Total No. of Students in respect of whom grants were paid.	Total Grant.	
	£ s. d.			£ s. d.		£ s. d.	
18	40 7 2	—	—	—	196	526 7 0	6850
18	29 19 3	—	—	—	133	211 12 2	6845
		—	—	—	132	260 15 6	6732
		—	—	—	67	70 9 10	7611
120	304 4 6	IV.	19	41 6 7	2,596	6,490 10 3	6727
		V.	459	2,016 14 6			
—	—	—	—	—	120	137 1 8	6397
—	—	—	—	—	8	12 17 5	6038
—	—	—	—	—	40	126 12 7	6133
20	29 8 9	—	—	—	147	313 6 0	6567
66	198 17 9	IV.	16	78 15 8	238	524 3 8	6574
—	—	—	—	—	—	—	—
18	42 1 2	IV.	24	401 15 10	24	401 15 10	7020
—	—	—	—	—	98	232 18 4	6582
—	—	—	—	—	70	159 13 4	6587
—	—	—	—	—	32	32 10 0	6295
—	—	—	—	—	36	47 18 10	6372
26	41 17 9	—	—	—	157	238 18 11	6344
—	—	—	—	—	74	111 14 2	6634
—	—	—	—	—	29	33 16 10	6748
9	15 10 6	IV.	9	136 0 1	41	169 3 0	6372
19	30 16 6	—	—	—	139	282 12 4	6235
5	9 13 10	—	—	—	96	182 12 11	6976
17	21 10 5	—	—	—	117	202 6 11	6943
25	40 5 3	V.	119	371 0 4	334	939 8 5	6437
—	—	—	—	—	20	20 15 9	6121
—	—	—	—	—	27	20 15 4	7015
—	—	—	—	—	23	20 14 10	7016
—	—	—	—	—	—	—	—
—	—	—	—	—	73	142 19 8	6701
—	—	—	—	—	42	79 0 0	6381
—	—	—	—	—	57	82 5 9	6707
—	—	—	—	—	60	119 11 5	6708
407	816 8 10	—	646	3,051 13 0	5,769	13,438 18 9	—
—	—	—	—	—	—	—	—
—	—	—	—	—	36	32 0 3	6596
—	—	—	—	—	54	65 4 10	6056
73	149 1 3	—	—	—	166	288 2 4	6763
73	149 1 3	—	—	—	255	395 7 5	—
211	445 13 9	—	104	87 13 7	2,206	4,601 17 9	—
141	259 9 8	—	939	2,526 12 11	2,693	6,081 18 11	—
407	816 8 10	—	646	3,051 13 0	5,769	13,438 18 9	—
73	149 1 3	—	—	—	255	395 7 5	—
532	1,700 13 6	—	1,639	5,645 19 6	10,923	23,918 1 4	—

II.

during the Financial Year, 1st April, 1911—31st March, 1912, in respect of
during the Academic Year, 1st August, 1910—31st July, 1911.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of School		
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant					Amount of Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	13	11	5	4	20 17 0	169 16 5	6247
12	4	—	—	6 0 10	—	—	—	—	—	52 19 8	6188
16	11	—	—	8 16 1	—	—	—	—	—	56 1 3	6170
—	—	—	—	—	—	—	3	—	4 13 7	61 6 2	6260
4	1	—	—	2 2 3	—	—	—	—	—	92 13 9	6182
—	—	—	—	—	—	—	—	—	—	11 8 8	6524
—	—	—	—	—	8	—	7	4	22 19 6	119 13 10	8308
—	—	—	—	—	—	—	10	2	13 19 8	165 18 2	6324
—	—	—	—	—	—	—	—	—	—	37 7 11	6174
—	—	—	—	—	—	—	—	—	—	273 17 3	6603
—	—	—	—	—	—	—	8	3	14 12 9	79 4 8	6659
12	6	9	—	30 18 0	—	—	—	—	—	126 4 8	6863
—	—	—	—	—	—	—	—	—	—	59 8 10	6097
—	—	—	—	—	—	—	—	—	—	24 10 7	6187
—	—	—	—	—	—	—	—	—	—	44 0 10	6357
—	—	—	—	—	—	—	—	—	—	314 4 9	8209
—	—	—	—	—	—	—	—	—	—	45 8 7	6262
—	—	—	—	—	—	—	—	—	—	41 1 8	6122
—	—	—	—	—	—	—	—	—	—	99 14 8	8281
—	—	—	—	—	—	—	—	—	—	40 12 6	6198
—	—	—	—	—	—	—	—	—	—	20 6 4	6006
—	—	—	—	—	—	—	—	—	—	62 6 8	6150
—	—	—	—	—	—	—	—	—	—	19 13 2	8059
—	—	—	—	—	—	—	—	—	—	21 3 0	6638
—	—	—	—	—	4	1	—	—	2 15 11	10 15 0	3545
—	—	—	—	—	—	—	7	—	8 11 9	82 1 10	4096
—	—	—	—	—	—	—	—	—	—	19 12 6	8791
—	—	—	—	—	—	—	—	—	—	49 5 5	6974

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					DRAWING				
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. DUBLIN—(continued.)					£ s. d.					£ s. d.
6261	Rathgar: Norfolk College	3	4	1	—	14 3 9	2	4	2	1	4 1 7
6095	Rathmines College	16	11	6	—	51 1 4	16	11	—	—	5 12 11
6099	Rathmines Loreto Convent	9	5	—	—	16 4 2	9	5	5	2	13 13 10
6251	Rathmines: St. Mary's College	33	16	11	—	39 12 6	33	16	—	—	10 13 1
6802	Ringsend: Pembroke Day Trades Preparatory School	37	12	7	—	163 11 10	37	12	7	—	12 11 2
6159	Co. BOMBURGH OF DUBLIN: Alexandra College	—	3	15	0	48 3 6	—	3	—	—	9 16 3
6264	Alexandra School	41	33	—	—	98 3 6	41	33	—	—	36 5 3
6142	Belvedere College	30	11	12	—	82 7 6	30	11	—	—	8 17 3
6096	Bertrand Intermediate School for Girls	20	18	—	—	47 10 8	20	18	—	—	17 12 11
6271	Catholic University School	11	5	4	—	25 18 9	11	5	—	—	2 15 10
6162	Christian Brothers' Schools, James's Street	49	38	12	8	129 12 5	49	38	12	5	32 14 8
6219	Christian Brothers' Schools, Marino	42	18	10	—	78 0 6	42	18	—	—	17 13 4
6130	Christian Brothers' Schools, N. Brunswick St.	28	9	—	—	44 2 5	28	9	—	—	7 15 3
6156	Christian Brothers' Schools, Nth. Richmond St.	188	132	69	11	507 8 0	188	102	—	—	76 15 3
6117	Christian Brothers' Schools, Synge Street	39	60	26	7	266 12 8	30	60	—	—	48 14 7
6344	Christian Brothers' Schools, Westland Row	49	32	12	—	119 16 1	49	32	—	—	26 15 7
6647	Church Home School, Clyde Road	10	2	6	—	32 8 9	10	2	—	—	4 2 6
6091	Diocesan Inter. and Commercial Sch. for Girls	26	22	—	—	63 10 8	26	22	—	—	14 4 2
6152	Diocesan School for Boys	23	19	9	—	84 15 7	23	19	—	—	10 2 3
6082	Dominican College, Eccles Street	94	50	29	11	298 15 3	94	50	—	—	37 13 7
6004	King's Hospital	22	24	18	9	153 10 9	22	24	—	—	12 5 9
6065	Loreto College, St. Stephen's Green	43	33	3	—	95 7 11	43	33	—	—	29 14 1
6021	Loreto Convent, North Great George's St.	14	9	5	2	50 16 5	14	9	—	—	7 15 8
6168	Mounstjoy School	47	37	18	21	237 8 6	47	37	—	—	24 16 4
6054	Rutland High School	11	12	2	—	34 2 0	11	12	3	—	12 13 6
6243	St. Andrew's College	34	30	21	5	163 11 6	34	30	—	—	23 9 8
6132	St. Margaret's Hall, Mosph. Road	9	6	8	—	30 0 0	9	6	—	—	3 6 6
6115	St. Vincent's Orphanage	31	24	16	13	178 7 8	31	24	—	—	19 13 8
6127	The High School	40	32	10	4	147 16 0	40	32	5	—	31 5 3
6146	Wesley College	28	22	7	—	79 12 11	27	28	4	—	23 19 8
	Co. KILDARE:										
6217	Athy: Christian Brothers' Schools	16	13	8	3	57 14 6	16	13	9	—	13 15 1
6285	Colbridge: Collegiate MSchool	29	27	—	—	03 16 10	20	27	26	3	41 17 7
6325	Monasterevan: Christian Brothers' Schools	6	3	—	—	11 7 1	6	3	—	—	2 11 7
6321	Nass: Christian Brothers' Schools	10	17	5	—	34 8 0	10	17	4	—	11 12 9
6130	Sallins: Clongowee Wood College	40	46	30	11	274 4 4	49	46	1	5	27 6 6

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	18 12 4	6261
—	—	—	—	—	—	—	—	—	—	56 14 3	6905
—	—	—	—	—	—	—	—	—	—	30 0 0	6029
—	—	—	—	—	—	—	—	—	—	100 5 7	6251
37	12	7	—	53 10 7	—	—	—	—	—	290 13 7	6802
—	—	—	—	—	—	—	—	—	—	49 0 0	6159
—	—	—	—	—	—	—	—	—	—	128 8 9	6264
—	—	—	—	—	—	—	—	—	—	91 5 3	6142
—	—	—	—	—	20	11	4	—	26 9 3	91 12 10	6906
—	—	—	—	—	—	—	—	—	—	28 12 7	6271
—	—	—	—	—	—	—	—	—	—	162 7 11	6162
19	—	—	—	4 16 3	—	—	—	—	—	100 10 1	6219
24	18	—	—	11 7 5	—	—	—	—	—	63 8 1	6159
153	39	—	—	75 17 10	—	—	—	—	—	660 1 1	6156
46	—	—	—	15 17 10	—	—	—	—	—	321 5 1	6117
—	—	—	—	—	—	—	—	—	—	148 14 8	6344
—	—	—	—	—	—	—	—	—	—	36 11 3	6647
—	—	—	—	—	—	—	12	3	20 3 4	97 12 3	6891
—	—	—	—	—	—	—	—	—	—	94 8 0	6152
—	—	—	—	—	29	—	32	12	50 14 3	317 3 1	6082
—	—	—	—	—	—	—	—	—	—	165 10 6	6094
—	—	—	—	—	—	—	17	5	35 14 2	100 16 8	6065
—	—	—	—	—	—	—	—	—	—	58 16 1	6021
—	—	—	—	—	—	—	—	—	—	262 4 10	6168
—	—	—	—	—	—	—	—	—	—	46 15 6	6054
—	—	—	—	—	—	—	—	—	—	102 1 2	6243
—	—	—	—	—	1	—	2	—	3 12 10	57 0 2	6132
26	23	11	—	30 7 9	—	—	—	—	—	228 11 1	6115
—	—	—	—	—	—	—	—	—	—	179 1 2	6127
1	2	—	—	1 3 10	—	—	—	—	—	104 15 9	6148
11	—	—	—	2 15 9	—	—	—	—	—	74 5 4	6217
—	—	—	—	—	—	—	23	3	24 16 5	180 10 10	6285
6	3	—	—	2 17 3	—	—	—	—	—	16 15 11	6329
—	—	—	—	—	—	—	—	—	—	46 0 9	6221
46	16	—	—	25 12 6	—	—	—	—	—	327 13 4	6139

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					Amount of Grant	DRAWING					Amount of Grant
		No. of Students recognised for Grant				No. of Students recognised for Grant		Amount of Grant					
		1st Year	2nd Year	3rd Year	4th Year				1st Year	2nd Year	3rd Year	4th Year	
6304	CO. KILKENNY: Callan: Christian Brothers' Schools	15	8	11	—	£ s. d. 48 2 3	15	8	—	—	£ s. d. 6 8 4		
6458	Goresbridge: Brigidine Convent	7	3	5	—	28 11 7	7	3	—	—	4 1 4		
6059	Kilkenny: Christian Brothers' Schools	33	18	11	—	71 3 8	33	15	—	—	16 10 12		
6487	Kilkenny College	16	18	12	—	94 15 5	16	16	9	—	20 6 8		
6268	Kilkenny: Loreto Convent	14	8	3	—	33 15 1	14	8	2	—	10 6 8		
6135	Kilkenny: St. Kieran's College	40	27	22	6	155 9 3	40	27	—	—	39 4 1		
6760	Kilkenny: Day Trades Preparatory School	2	8	10	—	69 7 3	2	6	10	—	15 5 11		
6205	KING'S COUNTY: Blirr: Presentation Brothers' Seminary	13	9	3	—	48 5 7	13	9	—	—	5 13 3		
6382	Portliffington: Christian Brothers Schools	14	4	7	—	44 10 4	14	4	—	—	4 18 6		
6849	(Jesuits): Mount St. Joseph's Abbey	59	44	24	—	212 8 2	59	44	—	—	15 13 7		
6225	CO. LONGFORD: Longford: St. Mel's College	19	19	12	6	94 3 4	19	19	—	—	11 3 3		
6103	CO. LOUTH: Drogheda: Christian Brothers' Schools	19	21	5	—	68 10 9	19	21	—	—	13 13 5		
6095	Drogheda Grammar School	11	8	4	—	34 13 7	11	8	—	—	3 13 10		
6173	Dundalk: Christian Brothers' Schools	46	13	14	—	91 5 9	46	13	—	—	12 3 7		
6350	Dundalk: Convent of Mercy	10	12	—	—	29 11 11	10	12	—	—	7 16 9		
6089	Dundalk: Educational Institution.	23	14	9	—	95 7 7	23	14	—	—	9 15 7		
6456	Dundalk: Ladies' School	7	3	2	—	18 13 2	7	3	—	—	1 16 7		
6116	Dundalk: St. Mary's College.	29	14	10	5	76 14 10	29	14	—	—	13 3 1		
6108	CO. MEATH: Kells: Christian Brothers' Schools	31	16	15	—	96 3 3	31	16	—	—	11 4 8		
6388	Navan: Loreto Abbey	37	14	—	—	56 12 7	37	14	—	—	26 4 6		
6310	QUEEN'S COUNTY: Abbeyleix: Brigidine Convent	10	5	5	—	34 5 1	10	5	5	—	9 13 7		
6029	Abbeyleix: Preston School	9	5	2	1	24 12 3	9	5	—	—	3 13 3		
6750	Castletown: De La Salle School	25	14	3	—	51 13 8	25	14	—	—	9 3 7		
6176	Maryborough: Christian Brothers' Schools	20	10	8	—	60 4 4	20	10	—	—	8 13 8		
6100	Mountrath: Monastery School	21	1	—	—	38 6 11	21	1	1	—	9 13 7		
6359	Mountrath: St. Brigid's Convent	13	18	4	—	73 5 9	13	18	—	—	11 15 10		
7014	CO. WESTMEATH: Athlone: Garrow House School	17	—	—	—	17 14 3	17	—	—	—	2 13 3		
6011	Athlone: Ranelagh School	13	17	11	—	65 8 5	13	17	—	—	7 19 11		
6215	Athlone: St. Mary's School	14	6	5	—	29 4 5	14	8	—	—	5 5 6		
6061	Mullingar: Christian Brothers Schools	17	4	—	—	21 2 9	17	4	6	—	9 13 3		
6536	Mullingar: Loreto Convent	25	10	—	—	39 13 1	25	10	2	—	17 3 11		
6561	Mullingar: St. Finian's College	43	24	19	11	141 3 10	43	24	—	—	14 10 8		

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of School	
No. of Students recognised for Grant				No. of Students recognised for Grant						Amount of Grant
1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year			
£ s. d.				£ s. d.				£ s. d.		
—	—	—	—	—	—	—	—	54 10 7	6394	
—	—	—	—	7	3	3	—	41 11 0	6458	
—	—	—	—	—	—	—	—	37 14 7	6459	
—	—	—	—	—	—	—	—	115 5 1	6487	
—	—	—	—	9	4	8	3	71 5 0	6508	
—	—	—	—	—	—	—	—	184 13 4	6135	
9	6	10	—	—	—	—	—	114 5 5	6769	
7	—	—	—	2	1	10	—	58 17 8	6205	
14	4	—	—	4	13	6	—	54 2 5	6362	
6	—	—	—	2	12	2	—	233 13 6	6849	
4	2	—	—	2	7	9	—	107 14 4	6228	
—	—	—	—	—	—	—	—	62 9 2	6193	
—	—	—	—	—	—	—	—	38 7 5	6098	
34	—	—	—	9	9	3	—	113 17 10	6173	
—	—	—	—	—	—	5	2	45 2 1	6250	
—	—	—	—	—	—	—	—	103 3 2	6089	
—	—	—	—	—	—	—	—	20 14 9	6456	
—	—	—	—	—	—	—	—	89 17 11	6116	
17	15	—	—	12	12	8	—	120 0 5	6193	
—	—	—	—	29	—	10	5	119 11 10	6568	
—	—	—	—	10	3	6	1	74 17 7	6310	
—	—	—	—	—	—	—	—	28 16 5	6029	
—	—	—	—	—	—	—	—	61 2 3	6750	
19	8	—	—	9	12	4	—	13 7 4	6176	
21	—	—	—	9	11	7	—	57 17 1	6196	
—	—	—	—	19	10	3	1	118 17 1	6359	
—	—	—	—	—	—	—	—	20 12 11	7014	
18	17	10	—	17	3	4	—	91 11 11	6911	
—	—	—	—	—	—	—	—	34 9 11	6215	
—	—	—	—	—	—	—	—	31 9 5	6961	
—	—	—	—	17	2	6	—	79 10 3	6536	
—	—	—	—	—	—	—	—	155 14 3	6561	

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCES					DRAWING					
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant	
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year		
		£ s. d.					£ s. d.					
6104	Co. WEXFORD. Ennisceortley : Christian Brothers' Schools	24	14	12	—	66 18 0	24	14	—	—	8 14 7	
6249	Ennisceortley : Loreto Convent	11	4	—	—	23 8 10	11	4	6	2	17 0 9	
6035	Gorey : Loreto Abbey	13	13	—	—	49 2 1	13	13	—	—	12 0 10	
6161	New Ross : Christian Brothers' Schools	16	11	7	—	51 1 7	16	11	—	—	8 0 0	
6064	New Ross : John Ivory School	4	2	2	—	8 11 7	4	2	—	—	1 4 39	
6733	Newtownbarry : St. Mary's Convent	27	17	8	3	131 3 6	27	17	—	—	29 29 0	
6341	Wexford : Christian Brothers' Schools, Joseph St.	36	18	11	—	79 6 2	36	18	—	—	12 16 7	
6086	Wexford : Loreto Convent	31	13	7	1	66 9 10	31	13	—	—	16 4 7	
6370	Wexford : St. Peter's College	13	6	—	—	23 11 1	13	6	—	—	7 1 9	
6330	Wexford : The Tate School	8	14	2	2	40 8 0	8	14	—	—	9 12 5	
6022	Co. WICKLOW; Bray : Loreto Convent	12	6	9	—	37 13 9	12	6	—	—	6 11 4	
TOTALS FOR LEINSTER		2,541	1,090	883	187	8,146 17 3	2,540	1,091	191	22	1,328 7 8	
MUNSTER.												
Co. CLARE :												
6137	Ennis : Christian Brothers' Schools	36	20	11	—	87 15 8	36	—	—	—	9 6 7	
6331	Ennis : St. Flannan's College	17	12	14	—	66 11 6	17	12	—	—	7 12 13	
6063	Ennis : St. Mary's School, Convent of Mercy	18	13	—	—	59 0 7	18	13	3	—	16 16 3	
6283	Ennistymon : Christian Brothers' Schools	22	9	2	—	49 2 1	22	9	—	—	7 12 8	
6225	Kilrush : Christian Brothers' Schools	21	16	6	4	71 1 10	21	16	—	—	9 12 10	
Co. CORK :												
6012	Blackrock : Ursuline Convent	17	6	—	—	25 18 4	17	6	1	—	10 18 2	
6675	Bultivat : St. Mary's Convent of Mercy	—	8	5	3	39 17 8	—	8	5	3	10 18 5	
6226	Charleville : Christian Brothers' Schools	36	8	—	—	44 10 1	36	8	4	—	13 16 1	
6145	Charleville : St. Joseph's Convent of Mercy	13	7	10	6	86 2 1	13	7	9	6	23 3 0	
6240	Doneraile : Christian Brothers' Schools	8	8	—	—	19 7 0	8	8	—	—	2 11 1	
6157	Ferney Christian Brothers' Schools	16	15	13	—	67 3 7	16	15	—	—	8 12 18	
6308	Ferney : Loreto Convent	18	14	—	—	40 6 3	18	14	13	3	23 12 2	
6191	Ferney : St. Colman's College	39	39	32	6	179 1 9	39	39	—	—	27 19 2	
6569	Macroom : Convent of Mercy	15	5	—	—	36 0 0	15	5	—	—	7 14 0	
6035	Malloy : Patriotic Academy	7	11	—	—	17 6 0	7	11	—	—	8 14 1	
6131	Midleton : Christian Brothers' Schools	16	24	11	6	95 2 7	16	24	—	—	13 4 3	
6740	Midleton College	—	9	4	—	23 10 3	—	9	—	—	2 15 7	
6110	Mitchelstown : Christian Brothers' Schools	18	11	10	—	64 0 3	18	11	10	—	16 8 1	
6555	Queenstown : Convent of Mercy	10	11	—	—	41 10 11	10	11	5	—	19 16 4	
6031	Queenstown : Presentation Brothers' College	12	11	1	—	37 2 8	12	11	—	—	6 2 1	

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
					£ s. d.					£ s. d.	£ s. d.
14	5	—	—	6 6 5	—	—	—	—	—	81 19 0	6104
—	—	—	—	—	—	—	6	2	12 12 3	53 1 10	6249
—	—	—	—	—	—	—	9	5	23 11 5	84 14 4	6085
—	—	—	—	—	—	—	—	—	—	59 7 7	6161
—	—	—	—	—	—	—	—	—	—	9 16 5	6064
—	—	—	—	—	27	15	6	3	33 6 6	186 9 0	6733
31	12	—	—	14 12 8	—	—	—	—	—	106 18 5	6341
—	—	—	—	—	—	—	7	—	9 0 0	91 14 5	6086
18	6	—	—	7 12 6	—	—	—	—	—	43 5 6	6070
—	—	—	—	—	—	—	—	—	—	50 1 5	6330
—	—	—	—	—	—	—	7	4	11 1 7	46 6 6	6022
623	205	47	—	397 12 9	193	60	206	62	510 16 11	10,575 16 7	—
17	—	—	—	5 14 6	—	—	—	—	—	102 16 9	6137
—	—	—	—	—	—	—	—	—	—	74 4 4	6321
—	—	—	—	—	—	—	—	—	—	66 16 10	6063
15	8	—	—	7 15 11	—	—	—	—	—	55 16 6	6283
28	—	—	—	6 9 7	—	—	—	—	—	37 4 3	6296
—	—	—	—	—	16	2	6	2	19 15 2	66 3 7	6012
—	—	—	—	—	—	6	6	3	20 9 11	71 3 0	6075
19	15	—	—	10 9 7	—	—	—	—	—	64 13 9	6286
—	—	—	—	—	13	7	10	6	46 19 6	156 10 7	6145
8	6	—	—	4 12 6	—	—	—	—	—	27 10 9	6240
15	11	—	—	6 17 1	—	—	—	—	—	64 3 6	6127
—	—	—	—	—	16	13	9	6	41 1 9	105 6 2	6306
—	—	—	—	—	—	—	—	—	—	207 1 0	6191
—	—	—	—	—	—	—	5	—	6 1 6	51 16 4	6569
7	7	4	—	3 11 0	—	—	—	—	—	23 12 3	6595
17	22	4	—	14 4 1	—	—	—	—	—	122 10 11	6131
—	—	—	—	—	—	—	—	—	—	26 5 10	6749
16	7	—	—	6 16 4	—	—	—	—	—	39 4 6	6110
—	—	—	—	—	—	—	3	1	10 11 1	62 16 4	6555
12	9	2	—	8 9 10	—	—	—	—	—	49 16 4	6061

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					Amount of Grant	DRAWING					Amount of Grant
		No. of Students recognised for Grant				No. of Students recognised for Grant		Amount of Grant					
		1st Year	2nd Year	3rd Year	4th Year								
		1st Year	2nd Year	3rd Year	4th Year	£ s. d.	1st Year	2nd Year	3rd Year	4th Year	£ s. d.		
0891	Co. Cork (continued). Queenstown Day Trades Preparatory School	9	6	1	—	40 12 3	9	6	1	—	8 7 1		
0742	Skibbereen Intermediate and Univ. School	5	8	—	—	18 17 10	5	6	—	—	3 11 8		
6323	Youghal Christian Brothers' Schools	17	11	13	—	67 5 9	17	11	6	—	19 12 11		
6017	Co. Bosworth or Cork: Christian Brothers' College	42	29	38	12	177 6 9	42	29	—	—	18 4 1		
6013	Christian Brothers' Schools, Our Lady's Mount	108	56	65	14	395 11 2	108	56	—	—	36 5 10		
6364	Christian Brothers' Schools, Sullivan's Quay	45	21	—	—	93 18 11	45	21	—	—	17 10 3		
6044	Grammar School	29	17	10	2	103 18 7	29	17	—	—	19 14 6		
6031	High School	18	15	—	2	43 4 0	18	15	—	—	15 11 2		
6066	Presentation Brothers' College	31	24	15	—	125 13 9	31	24	—	—	15 7 1		
6077	Rockelle Seminary	21	20	—	—	65 17 10	21	20	—	—	17 15 0		
6057	St. Aloysius' School, St. Marie's of the Isle	22	19	—	—	39 6 5	22	19	9	—	29 16 11		
6024	St. Vincent's Convent School	42	14	—	—	60 3 9	42	14	5	—	17 7 4		
6133	Ursuline High School, St. Angela's	29	29	—	—	74 3 11	29	29	4	4	26 13 9		
6154	Co. Kerry: Dingle Christian Brothers' Schools	19	19	14	—	112 7 9	19	19	—	—	11 11 2		
6048	Kilbarney Loreto Convent	29	15	9	—	73 10 10	29	15	—	—	18 19 10		
6241	Killarney St. Brendan's Seminary	21	20	15	—	89 17 5	21	20	—	—	3 9 0		
6997	Killorglin Intermediate School	42	—	—	—	46 17 6	42	—	—	—	11 2 9		
6317	Listowel St. Michael's College	17	21	8	—	73 18 4	17	21	—	—	13 16 8		
6179	Trillick Christian Brothers' Schools	46	23	16	—	100 7 6	46	23	—	—	14 15 7		
6123	Trillick Jeffers' Institute	23	9	7	4	84 14 4	23	9	—	—	9 13 3		
6043	Trillick Presentation Convent	21	13	—	—	47 5 6	21	13	4	—	18 4 9		
6098	Co. Limerick:- Bruff St. Mary's Convent	27	23	—	—	53 14 1	27	23	—	—	17 13 4		
6237	Kilmeane St. Andrew's Secondary School	3	4	—	—	16 13 2	3	4	—	—	2 6 9		
6160	Co. Bosworth or Limerick: Christian Brothers' Schools (Section I.)	74	40	31	—	207 3 3	74	40	—	—	26 4 3		
6085	Christian Brothers' Schools (Section II.)	25	11	—	—	29 16 3	25	11	—	—	11 4 6		
6523	Crescent College	29	21	6	6	95 11 7	29	21	—	—	7 11 9		
6048	High School, Richmond House	—	1	1	—	2 19 3	—	1	—	—	0 4 10		
6656	Intermediate School, Rutland Street	1	1	2	1	6 13 10	1	1	—	—	0 5 4		
6172	Laurel Hill Convent	31	17	—	—	52 9 5	31	17	—	—	18 15 1		
6297	Mount St. Alphonsus' School	3	1	4	2	18 9 9	3	1	—	—	1 6 3		
6097	Mungret College	16	11	6	—	34 6 7	16	11	—	—	3 14 3		
6151	St. Munchin's College	21	20	12	4	71 4 2	21	20	—	—	11 4 10		
6644	Villiers' Endowed Boys' School	8	6	3	—	18 13 8	8	6	—	—	2 12 4		
6637	Villiers' Endowed Girls' School	2	4	2	—	9 13 7	2	4	—	—	1 5 4		

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
9	6	1	—	£ s. d. 12 12 4	—	—	—	—	£ s. d. —	£ s. d. 61 11 8	6891
5	8	—	—	3 17 1	—	—	—	—	—	25 6 7	6742
13	13	—	—	11 8 7	—	—	—	—	—	39 11 3	6326
—	—	—	—	—	—	—	—	—	—	195 6 10	6817
23	—	10	6	13 16 4	—	—	—	—	—	448 10 4	6813
23	—	—	—	8 3 4	—	—	—	—	—	119 12 8	6354
—	—	—	—	—	—	—	—	—	—	123 13 1	6044
—	—	—	—	—	—	—	—	—	—	60 16 2	6031
—	—	—	—	—	—	—	—	—	—	141 6 10	6056
—	—	—	—	—	—	—	15	1	23 12 5	107 4 3	6077
—	—	—	—	—	8	1	7	—	11 0 11	121 2 3	6057
—	—	—	—	—	—	—	—	—	—	77 11 1	6024
—	—	—	—	—	—	—	—	—	—	101 6 11	6138
—	—	—	—	—	—	—	—	—	—	123 19 4	6134
—	—	—	—	—	—	—	—	—	—	92 10 8	6048
—	—	—	—	—	—	—	—	—	—	97 17 5	6241
—	—	—	—	—	—	—	—	—	—	87 19 11	6397
—	—	—	—	—	—	—	—	—	—	92 12 4	6317
—	—	—	—	—	—	—	—	—	—	115 4 1	6179
—	—	—	—	—	—	—	—	—	—	94 8 1	6123
—	—	—	—	—	—	—	—	—	—	65 9 3	6063
—	—	—	—	—	27	28	—	—	34 14 5	111 7 10	6898
—	—	—	—	—	—	—	—	—	—	18 19 11	6237
2	1	—	—	1 1 6	—	—	—	—	—	234 14 6	6100
26	10	—	—	26 1 10	—	—	—	—	—	87 3 0	6885
1	1	—	—	0 14 1	—	—	—	—	—	104 0 5	6523
—	—	—	—	—	—	—	—	—	—	2 15 1	6043
—	—	—	—	—	—	—	—	—	—	6 19 3	6650
—	—	—	—	—	8	—	25	—	35 11 5	106 13 3	6173
—	—	—	—	—	—	—	—	—	—	19 16 6	6297
—	—	—	—	—	—	—	—	—	—	83 6 10	6897
—	—	—	—	—	—	—	—	—	—	82 9 6	6151
—	—	—	—	—	—	—	—	—	—	21 10 11	6644
—	—	—	—	—	—	—	—	—	—	11 4 9	6637

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
Co. TIPPERARY :											
						£ s. d.					£ s. d.
6101	Carick-on-Suir : Christian Brothers' Schools	21	—	9	—	36 8 1	21	—	—	—	5 13 18
6361	Cashel : Christian Brothers' Schools	8	10	—	—	20 8 2	8	10	—	—	8 0 1
6147	Cashel : Presentation Convent	12	4	—	—	20 12 4	12	4	—	—	5 9 1
6208	Cashel : Rockwell College	68	46	26	—	189 10 9	68	46	—	—	22 12 1
6294	Clommel : Christian Brothers' Schools, St. Mary's	11	6	4	—	23 16 6	11	6	—	—	4 2 11
6134	Clommel : Christian Bros.' Schools, SS. Peter & Paul	27	9	6	—	41 6 11	27	9	—	—	6 19 11
6079	Clommel : Grammar School	8	7	6	—	38 6 5	8	7	—	—	3 13 6
6380	Clommel : Day Trades Preparatory School	13	10	—	—	63 2 9	13	10	—	—	15 19 9
6229	Kearagh : Christian Brothers' Schools	16	13	6	—	41 6 10	16	13	—	—	5 5 11
6166	Thurles : Christian Brothers' Schools	25	24	15	—	93 9 3	25	24	—	—	15 0 11
6148	Thurles : Presentation Convent	30	12	—	—	49 2 3	30	12	—	—	25 1 4
6069	Thurles : Ursuline Convent	37	23	11	—	82 17 8	37	23	—	—	21 11 8
6183	Tipperary : Christian Brothers' Schools	36	18	18	—	88 4 10	36	18	—	—	18 8 6
6301	Tipperary : Convent of Mercy	12	11	—	—	31 12 5	12	11	—	—	9 9 11
6099	Tipperary : Grammar School	5	7	2	—	16 18 10	5	7	—	—	3 14 7
Co. WATERFORD :											
6803	Cappoquin : Mount Mellery Seminary.	31	16	12	11	116 4 8	31	16	—	—	10 13 8
6214	Dangarran : Christian Brothers' Schools	17	12	7	—	58 14 10	17	12	—	—	9 0 3
6840	Dangarran : St. Augustine's Seminary.	5	4	5	—	35 15 3	5	4	—	—	2 7 5
6104	Lismore : Christian Brothers' Schools	18	14	2	6	63 15 1	18	14	—	—	7 17 2
6191	Lismore : Christian Brothers' Schools	16	14	7	—	44 4 8	16	14	—	—	8 12 11
Co. BOROUGH OF WATERFORD :											
6031	Bishop Foy High School for Boys.	17	11	3	3	45 18 0	17	11	—	—	5 14 9
6118	Christian Brothers' Schools, Mount Sion	49	23	17	—	107 16 8	49	23	—	—	14 7 3
6165	Christian Brothers' College, Waterpark	21	12	19	—	87 0 2	21	12	—	—	10 6 1
6084	Convent of the Sacred Heart, Ferrybank	40	17	10	2	120 12 6	40	17	9	2	31 18 11
6651	Gluck High School	5	6	—	—	15 8 11	5	6	—	—	2 9 6
6912	Municipal Day Trades Preparatory School	29	9	—	—	69 18 5	29	9	—	—	12 0 5
6074	Newtown School	18	12	—	1	41 0 5	18	12	—	—	13 0 7
6100	St. Anne's High School, Ursuline Convent	22	20	7	3	161 12 8	22	20	—	—	16 1 7
TOTALS FOR MUNSTER.		1,794	1,194	590	93	5,455 6 8	1,794	1,174	88	18	990 15 9

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
9	12	—	—	8 1 4	—	—	—	—	—	56 8 3	6101
8	10	—	—	6 0 9	—	—	—	—	—	32 9 1	6361
—	—	—	—	—	—	—	7	4	13 13 7	42 15 0	6147
—	—	—	—	—	—	—	—	—	—	212 2 10	6208
—	—	—	—	—	—	—	—	—	—	27 19 5	6294
14	—	—	—	3 3 11	—	—	—	—	—	51 10 9	6134
6	8	—	—	5 2 10	—	—	—	—	—	47 2 9	6079
13	10	—	—	26 4 1	—	—	—	—	—	165 4 8	6280
16	11	—	—	7 9 2	—	—	—	—	—	54 1 11	6229
22	12	—	—	9 17 5	—	—	—	—	—	118 7 7	6166
—	—	—	—	—	20	12	—	—	28 10 7	102 14 3	6118
—	—	—	—	—	—	—	4	8	10 11 4	115 0 2	6069
27	12	11	—	22 6 1	—	—	—	—	—	128 14 5	6183
—	—	—	—	—	—	—	7	—	8 12 2	48 14 6	6301
—	—	—	—	—	—	—	—	—	—	26 13 5	6099
—	—	—	—	—	—	—	—	—	—	136 15 2	6063
17	12	—	—	12 1 2	—	—	—	—	—	79 16 10	6214
—	—	—	—	—	—	—	—	—	—	36 2 11	6040
14	—	—	—	5 5 0	—	—	—	—	—	76 17 3	6264
16	14	—	—	8 7 6	—	—	—	—	—	61 5 1	6221
—	—	—	—	—	—	—	—	—	—	51 12 9	6051
19	—	—	—	6 13 2	—	—	—	—	—	128 17 1	6118
—	—	—	—	—	—	—	—	—	—	97 4 8	6165
—	—	—	—	—	33	14	8	3	46 0 2	163 11 7	6084
—	—	—	—	—	—	—	3	1	5 10 10	23 9 3	6051
20	9	—	—	23 2 9	—	—	—	—	—	165 1 7	6012
10	9	—	—	8 14 4	—	—	—	—	—	83 1 4	6074
—	—	—	—	—	25	8	7	5	29 18 7	147 12 10	6100
477	243	32	6	307 5 8	161	98	123	40	396 15 6	7,186 0 8	—

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					DRAWING				
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	ULSTER.					£ s. d.					£ s. d.
	Co. ANTRIM :										
6796	Ballyclare : Intermediate School.	7	5	—	—	14 19 1	7	5	5	—	4 15 0
6119	Ballymena Academy.	67	43	21	11	249 11 9	67	43	—	—	10 3 1
7903	Ballymena : Municipal Day Trades Prep. School	9	—	—	—	27 4 9	9	—	—	—	3 1 4
6244	Ballymoney : Intermediate School	21	20	6	—	33 8 5	21	20	10	3	29 5 1
6551	Carrickfergus : Ladies' Collegiate School	7	7	—	3	26 12 1	7	7	—	—	6 3 11
6189	Larne : Grammar School	13	16	7	—	66 6 11	13	15	—	—	6 17 1
6257	Larne : Intermediate School	6	2	4	—	12 13 11	6	2	4	—	9 2 1
6028	Lisburn : Convent of the Sacred Heart of Mary	7	7	1	—	25 5 9	7	7	—	—	6 4 6
6194	Lisburn : Intermediate School	19	14	6	—	33 5 3	19	14	—	—	7 15 10
6114	Lisburn : Ulster Provincial School	15	12	—	—	35 11 9	15	12	—	—	12 11 1
	Co. DUBLIN or BELFAST :										
6030	Christian Brothers' Schools, St. Mary's	28	25	17	—	129 12 3	28	25	—	—	13 6 30
6299	Christian Brothers' Schools, St. Patrick's	31	28	—	—	76 16 6	31	28	—	—	17 2 2
6685	Christian Brothers' Day Trades Preparatory School	53	29	17	—	348 4 9	53	29	17	—	69 15 1
6175	Collegiate School, Brookvale Avenue	9	12	3	—	29 4 11	9	12	5	—	10 15 9
6134	Girls' Collegiate School, Mount Prospect	10	12	—	—	25 1 9	10	12	4	1	13 1 6
6192	Marionville College	40	24	7	—	128 19 11	40	24	—	—	17 4 11
6218	Methodist College	39	34	4	—	116 12 5	39	34	—	—	15 13 3
6684	Municipal Day Trades Preparatory School	34	55	17	—	684 15 4	34	55	17	—	128 19 6
6186	Princess Gardens School	26	13	4	1	57 14 0	26	13	6	—	16 18
6318	Roseville High School	3	7	3	—	18 0 1	3	7	3	—	5 15 3
6032	Royal Academical Institution	74	128	41	10	519 0 9	74	128	—	—	63 11 1
6049	Royal Academy	36	19	14	6	151 14 3	36	19	—	—	15 6 3
6164	St. Dominic's High School	23	13	6	—	57 0 7	23	13	—	—	9 16 3
6085	St. Malachy's College	42	15	13	7	139 6 8	42	15	—	—	13 1 3
6071	Victoria College	30	29	7	2	101 14 3	30	29	7	2	41 14 6
	Co. ARMAGH :										
6209	Armagh : Christian Brothers' Schools	15	14	4	—	41 1 9	15	14	—	—	7 7 8
6055	Armagh : Royal School	12	19	7	—	51 5 0	12	19	—	—	9 19 6
6053	Lurgan College	18	9	8	—	51 10 0	18	9	—	—	6 21 3
6351	Portadown : Day Trades Preparatory School	4	14	4	—	56 14 4	4	14	4	—	21 3 6
6352	Portadown : Ladies' School	10	13	6	—	51 3 1	10	13	—	—	10 9 10

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	21 17 1	6796
—	—	—	—	—	—	—	—	—	—	279 14 10	6119
9	—	—	—	9 16 5	—	—	—	—	—	46 2 6	7003
7	8	—	—	6 17 2	10	9	10	2	26 14 4	146 7 10	6244
—	—	—	—	—	—	—	—	—	—	32 16 0	6351
—	—	—	—	—	—	—	—	—	—	73 4 0	6199
—	—	—	—	—	4	2	4	—	7 12 6	29 8 6	6257
—	—	—	—	—	8	5	—	1	13 14 0	45 3 9	6028
—	—	—	—	—	—	—	—	—	—	90 16 1	6194
—	—	—	—	—	—	—	—	—	—	48 2 10	6114
—	—	—	—	—	—	—	—	—	—	135 18 1	6080
—	—	—	—	—	—	—	—	—	—	93 19 2	6220
33	29	17	—	97 15 3	—	—	—	—	—	515 14 10	6085
—	—	—	—	—	—	—	—	—	—	40 8 8	6175
—	—	—	—	—	—	—	—	—	—	38 2 6	6184
—	—	—	—	—	—	—	—	—	—	166 4 10	6192
—	—	—	—	—	—	—	8	—	10 6 5	142 12 6	6213
34	33	17	—	202 19 5	—	—	—	—	—	1047 13 9	6684
—	—	—	—	—	—	—	—	—	—	70 10 5	6186
—	—	—	—	—	—	—	—	—	—	23 15 4	6318
—	—	—	—	—	—	—	—	—	—	382 15 4	6032
—	—	—	—	—	—	—	—	—	—	167 1 6	6049
—	—	—	—	—	—	—	—	—	—	67 4 10	6164
—	—	—	—	—	—	—	—	—	—	157 7 11	6095
—	—	—	—	—	—	—	8	2	14 11 4	167 19 10	6071
—	—	—	—	—	—	—	—	—	—	48 8 9	6200
—	—	—	—	—	—	—	—	—	—	61 7 4	6055
—	—	—	—	—	—	—	—	—	—	57 12 2	6053
4	14	4	—	31 7 6	—	—	—	—	—	29 5 4	6851
—	—	—	—	—	—	—	—	—	—	61 3 11	6853

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					Amount of Grant	DRAWING					Amount of Grant
		No. of Students recognised for Grant				No. of Students recognised for Grant		Amount of Grant					
		1st Year	2nd Year	3rd Year	4th Year								
	CO. CAVAN :												
6181	Cavan : Royal School .	4	3	2	—	£ s. d. 17 19 5	4	3	—	—	£ s. d. 5 5 7		
6124	Cavan : St. Patrick's College	19	15	24	—	82 8 1	19	13	—	—	9 9 4		
	CO. DONEGAL :												
6273	Lettisteeney : Loreto Convent	15	11	—	—	35 14 9	15	11	5	1	16 16 8		
6397	Lettisteeney : St. Eunan's College	20	13	4	—	46 12 7	20	13	—	—	3 11 8		
6062	Lifford : Prior Schools .	16	11	6	2	49 6 0	16	11	—	—	11 15 9		
6087	Raphoe : Royal School .	15	10	3	3	50 1 0	15	10	—	—	3 9 1		
	CO. DOWN :												
6265	Banbridge : Academical Institution	17	11	8	—	59 11 3	17	11	—	—	10 2 11		
6063	Banbridge : Excelsior Academy	4	5	3	—	21 8 0	4	5	—	—	3 12 3		
6357	Bangor : Endowed School	19	15	5	—	47 4 7	19	15	—	—	7 15 3		
6316	Bangor : Glenkiln School	2	6	2	—	14 11 5	2	0	—	—	3 12 4		
6226	Bangor : Ladies' Collegiate School	1	4	2	—	8 3 7	1	4	—	—	1 13 3		
6223	Bangor : Ladies' School, Dunlris	13	1	4	—	25 16 9	13	1	—	—	4 17 3		
6075	Hollywood : Upper Sullivan School	15	14	8	1	82 17 1	15	14	3	—	13 8 4		
6171	Newry : Christian Brothers' Schools	17	11	5	5	56 3 6	17	11	—	—	8 3 3		
6263	Newry : Intermediate School	20	9	—	—	29 2 11	20	9	—	—	6 13 5		
6092	Newry : St. Colman's College	11	5	8	3	63 7 10	11	5	8	3	15 4 8		
	CO. FERMANAGH :												
6169	Enniskillen : Portora Royal School	15	13	11	—	70 15 2	15	13	—	—	8 5 10		
6578	Enniskillen : St. Michael's Intermediate School	14	13	7	—	48 3 10	14	13	—	—	4 6 7		
	CO. LONDONDERRY :												
6136	Coleraine : Academical Institution	14	27	11	—	90 13 10	14	27	—	—	19 6 1		
6126	Coleraine : The High School	24	10	—	—	60 7 3	24	16	10	2	20 4 9		
6395	Coleraine : Ursuline Convent	10	—	—	—	10 5 8	10	—	3	—	6 11 14		
6288	Limeavady : Rochbank School	12	—	—	—	14 6 11	12	—	2	—	8 6 5		
6538	Magherafelt : Rainey Endowed School	23	14	—	—	51 14 8	22	14	5	—	15 11 3		
	CO. MONAGHAN OF LONDON- DERRY :												
6085	Christian Brothers' School, Broom of the Hill	21	17	—	—	63 15 11	21	17	—	—	15 8 5		
6549	Convent of Our Lady of Mercy	19	18	9	—	101 10 4	19	18	8	—	23 5 6		
6094	Foyle College .	41	20	7	5	121 3 6	41	20	—	—	25 15 9		
7000	Municipal Day Trades Preparatory School	9	—	—	—	32 9 2	9	—	—	—	6 5 7		
6140	St. Columb's College .	16	8	5	—	43 0 0	16	8	—	—	7 16 11		
6673	St. Lurach's College	5	13	—	—	20 17 10	5	13	4	2	10 5 7		
6109	Strand House School .	15	28	17	5	232 8 1	15	28	9	—	33 14 7		
6058	Victoria High School .	42	27	11	18	275 13 0	42	27	20	14	70 19 7		

SECONDARY SCHOOLS, &c.—continued,

MANUAL INSTRUCTION				DOMESTIC ECONOMY					Total Amount of Grants	No. of Schools	
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant						Amount of Grant
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
—	—	—	—	£ s. d.	—	—	—	—	£ s. d.	23 5 0	6181
—	—	—	—	—	—	—	—	—	—	91 17 7	6124
—	—	—	—	—	13	7	5	1	24 17 7	77 8 10	6273
—	—	—	—	—	—	—	—	—	—	55 4 4	6307
—	—	—	—	—	—	—	—	—	—	61 2 9	6062
—	—	—	—	—	—	—	—	—	—	53 10 0	6087
—	—	—	—	—	—	—	—	—	—	69 14 2	6206
—	—	—	—	—	—	—	—	—	—	24 0 8	6698
—	—	—	—	—	—	—	—	—	—	54 19 10	6857
—	—	—	—	—	—	—	—	—	—	18 3 9	6316
—	—	—	—	—	—	—	—	—	—	9 16 10	6226
—	—	—	—	—	—	—	—	—	—	50 14 6	6232
7	5	2	—	4 17 7	—	—	—	—	—	101 3 0	6075
—	—	—	—	—	—	—	—	—	—	64 7 2	6171
16	6	—	—	7 0 11	7	2	—	—	3 19 11	46 17 6	6263
—	—	—	—	—	—	—	—	—	—	12 4	6092
—	—	—	—	—	—	—	—	—	—	79 1 0	6169
—	—	—	—	—	—	—	—	—	—	52 10 5	6578
—	—	—	—	—	—	—	—	—	—	110 5 0	6136
—	—	—	—	—	—	—	—	—	—	80 12 0	6126
—	—	—	—	—	—	—	—	—	—	17 3 7	6895
—	—	—	—	—	—	—	—	—	—	22 13 7	6283
—	—	—	—	—	—	—	—	—	—	67 6 5	6588
21	17	—	—	16 13 10	—	—	—	—	—	95 19 2	6088
—	—	—	—	—	—	—	9	—	15 0 8	140 0 6	6549
—	—	—	—	—	—	—	—	—	—	140 19 3	6694
9	—	—	—	11 5 9	—	—	—	—	—	49 17 6	7000
—	—	—	—	—	—	—	—	—	—	49 16 11	6140
—	—	—	—	—	—	—	—	—	—	37 5 5	6673
—	—	—	—	—	—	—	—	—	—	266 2 2	6109
—	—	—	—	—	—	—	—	—	—	446 12 7	6058

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant				No. of Students recognised for Grant						
		1st Year	2nd Year	3rd Year	4th Year	1st Year		2nd Year	3rd Year	4th Year		
						£ s. d.					£ s. d.	
6643	Co. MONAGHAN: Carrickmacross: Patrickian Brothers' School.	3	5	—	—	10 7 3	3	5	—	—	2 18 3	
6223	Carrickmacross: St. Louis' Convent	18	17	9	3	123 3 4	18	17	4	—	23 18 6	
6213	Carrickmacross: Viscount Weymouth's Grammar School	7	5	2	—	18 8 0	7	5	—	—	3 2 6	
6196	Monaghan: Christian Brothers' Schools	11	13	—	—	25 10 4	11	13	—	—	5 4 9	
6225	Monaghan: St. Louis' Convent	38	29	6	7	179 10 5	38	29	—	—	32 12 5	
6078	Monaghan: St. Macarten's Seminary	16	23	32	14	166 17 8	16	23	—	—	3 11 7	
Co. TYRONE:												
6322	Cookstown Academy	11	8	7	3	52 12 6	11	8	—	—	6 16 11	
6128	Cookstown: Ladies' School	10	15	3	3	47 1 4	10	15	4	6	26 11 7	
6006	Dungannon: Girls' School	8	7	2	1	36 15 9	8	7	—	—	5 18 4	
6231	Dungannon: Royal School	26	9	10	3	67 9 11	26	9	—	—	7 15 4	
6090	Dungannon: St. Patrick's Academy	24	4	3	—	35 17 4	24	4	—	—	7 13 4	
6076	Omagh Academy	13	10	6	—	65 13 3	13	10	—	—	10 14 4	
6189	Omagh: Christian Brothers' School	26	16	6	1	75 18 1	26	16	—	—	9 9 1	
6083	Omagh: High School	10	10	6	—	41 19 5	10	10	5	—	13 6 2	
6211	Omagh: Loretto Convent	16	16	6	5	99 3 6	16	16	1	—	11 3 9	
TOTALS FOR ULSTER.		1,476	1,191	493	122	6,514 19 3	1,476	1,190	171	33	1,253 15 11	
CONNAUGHT.												
Co. GALWAY:												
6630	Ballinasloe: St. Joseph's College	10	16	8	2	71 18 4	10	16	—	—	8 8 6	
6047	Galway: Dominican Convent, Taylor's Hill	31	23	—	—	47 8 2	31	23	13	—	26 14 0	
6242	Galway: Grammar School.	8	8	5	3	39 14 11	8	8	—	—	4 15 3	
6305	Galway: St. Ignatius' College.	13	13	8	—	52 12 8	13	13	—	—	9 8 5	
6076	Galway: St. Joseph's Seminary	17	12	—	—	34 12 0	17	12	—	—	9 7 3	
6220	Tuam: Christian Brothers' Schools	15	14	—	—	56 6 9	15	14	—	—	13 5 13	
6527	Tuam: St. Jarlath's College	36	21	15	7	139 1 3	36	21	—	—	13 5 5	
Co. MAYO:												
6258	Ballina: St. Muredach's College	24	17	8	—	73 5 1	24	17	—	—	11 17 7	
6096	Castlbar: St. Gerald's College	34	—	—	—	59 10 9	34	—	—	—	9 6 1	
6262	Keshmogh: St. Louis' Convent	41	25	12	—	148 3 5	41	25	—	—	24 8 10	
6278	Westport: Christian Brothers' Schools	16	14	7	—	53 0 0	16	14	—	—	7 16 8	
Co. ROSCOMMON:												
6245	Ballinacorney: Diocesan College	14	15	10	—	53 4 4	14	15	—	—	7 19 3	

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY					Total Amount of Grants	No. of School	
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant						Amount of Grant
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
—	—	—	—	£ s. d.	—	—	—	—	£ s. d.	£ s. d.	
—	—	—	—	—	18	17	9	3	87 18 1	12 5 5	6643
—	—	—	—	—	—	—	—	—	—	214 19 11	6223
—	—	—	—	—	—	—	—	—	—	21 11 3	6215
11	13	—	—	9 10 10	—	—	—	—	—	40 5 11	6196
—	—	—	—	—	4	—	19	8	49 0 0	241 2 10	6225
—	—	—	—	—	—	—	—	—	—	189 9 3	6078
—	—	—	—	—	—	—	—	—	—	59 9 5	6322
—	—	—	—	—	—	—	—	—	—	67 12 6	6128
—	—	—	—	—	—	—	—	—	—	36 13 9	6066
—	—	—	—	—	—	—	—	—	—	74 16 3	6231
—	—	—	—	—	—	—	—	—	—	43 15 5	6090
—	—	—	—	—	—	—	—	—	—	76 7 7	6578
—	—	—	—	—	—	—	—	—	—	85 7 2	6159
—	—	—	—	—	—	—	—	—	—	55 6 1	6083
—	—	—	—	—	—	—	8	5	14 3 8	194 10 2	6211
310	157	40	—	388 4 8	64	42	78	20	247 18 6	3,406 18 4	—
10	7	1	1	7 8 8	—	—	—	—	—	87 18 0	6039
—	—	—	—	—	15	11	16	—	33 19 8	128 1 10	6067
—	—	—	—	—	—	—	—	—	—	44 10 2	6242
—	—	—	—	—	—	—	—	—	—	62 7 1	6305
17	12	—	—	9 14 3	—	—	—	—	—	58 13 8	6076
15	14	—	—	14 2 1	—	—	—	—	—	83 8 8	6220
—	1	—	—	0 10 0	—	—	—	—	—	152 16 8	6527
6	3	—	—	4 7 6	—	—	—	—	—	39 10 2	6238
—	—	—	—	—	—	—	—	—	—	68 16 10	6098
—	—	—	—	—	—	—	—	6	9 5 2	181 17 5	6202
10	14	—	—	8 18 4	—	—	—	—	—	70 4 0	6278
—	—	—	—	—	—	—	—	—	—	41 3 6	6245

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCES				DRAWING			
		No. of Students recognised for Grant				No. of Students recognised for Grant			
		1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year
	Co. Sligo :								
6399	Sligo : Grammar School, .	17	16	10	3	129 11 4	17	16	—
6144	Sligo : Summerhill College	37	19	27	10	256 18 1	37	19	—
6918	Sligo : Day Trades Preparatory School	8	8	—	—	44 10 3	8	8	—
6197	Sligo : Ursuline Convent	30	22	17	—	158 2 11	30	22	—
	TOTALS FOR CONNAUGHT,	360	243	127	25	1,438 3 3	360	243	13
	TOTALS for Leinster, . (106 Schools).	2,543	1,866	883	187	8,146 17 3	2,549	1,861	161
	TOTALS for Munster, . (82 Schools).	1,194	1,194	580	98	5,485 6 8	1,194	1,174	85
	TOTALS for Ulster, . (76 Schools).	1,478	1,191	493	122	6,514 19 3	1,476	1,190	171
	TOTALS for Connaught, (16 Schools).	360	243	127	25	1,438 3 3	360	243	13
	TOTALS FOR IRELAND (280 Schools).	6,171	4,288	2,003	432	21,585 6 5	6,170	4,268	433

SECONDARY SCHOOLS, &c.—*continued.*

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of Schools
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	136 19 9	6899
11	12	—	1	8 13 4	—	—	—	—	—	279 6 9	6141
8	8	—	—	20 8 7	—	—	—	—	—	79 2 8	6918
—	—	—	—	—	17	16	—	—	19 10 6	206 19 5	6197
63	71	1	2	74 2 9	32	27	15	6	62 15 4	1,786 8 5	—
693	286	47	—	397 12 9	193	69	208	62	510 18 11	10,575 16 7	—
477	243	32	6	397 5 9	161	23	123	40	390 15 6	7,150 0 8	—
219	147	49	—	388 4 8	61	42	78	29	247 18 6	3,406 13 4	—
82	71	1	2	74 2 9	32	27	15	6	62 15 4	1,786 8 5	—
462	668	120	8	1,167 5 11	459	222	424	128	1,218 8 3	27,955 4 0	—

TABLE IV.—LIST OF PRIMARY SCHOOLS showing the Grants paid by the Department during the Financial Year, 1st April, 1911—31st March, 1912, in respect of Instruction in Drawing and Manual Work.

No. of School	Name of School	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of scholars under Instruction.	Amount of Grant.	
	LEINSTER.			£ s. d.		£ s. d.	£ s. d.
6170	Co. CARLOW: Carlow: Christian Brothers' Schools.	31.1.12	208	20 16 0	—	—	20 16 0
6260	Carlow: Convent of Mercy.	30.11.11	30	3 0 0	—	—	3 0 0
	Co. DUBLIN:						
6284	Arlane: Industrial School.	31.10.11	778	77 16 0	132	29 6 0	137 2 0
6601	Blackrock: Month Industrial School.	31.1.12	22	0 4 0	27	2 13 5	18 17 5
6337	Castlknock: Morgan's Endowed School.	30.11.11	12	1 10 0	—	—	1 10 0
6150	Kingstown: Christian Brothers' Schools.	30.11.11	250	25 0 0	—	—	25 0 0
6327	Monkstown: Curriglen Park Industrial School.	31.12.11	152	15 4 0	49	20 13 0	35 17 0
	Co. DUBLIN OF DUBLIN:						
6366	Christian Brothers' Schools, Francis Street.	31.1.12	320	32 0 0	—	—	32 0 0
6345	Christian Brothers' Schools, Golden Bridge.	31.5.11	113	(a) 11 6 0	—	—	11 6 0
6340	Christian Brothers' Schools, Great Strand Street.	31.12.11	244	24 8 0	20	6 3 0	30 11 0
6162	Christian Brothers' Schools, James's Street.	31.5.11	329	(a) 42 13 4	—	—	42 13 4
6219	Christian Brothers' Schools, Marino.	31.12.11	239	23 18 0	—	—	23 18 0
6130	Christian Brothers' Schools, North Brunswick Street.	31.5.11	249	(a) 24 18 0	—	—	24 18 0
6156	Christian Brothers' Schools, North Richmond Street.	31.12.11	354	35 8 0	28	9 19 2	45 7 2
6333	Christian Brothers' Schools, St. Laurence O'Toole.	31.12.11	175	17 10 0	22	6 11 5	24 1 5
6330	Christian Brothers' Schools, St. Mary's Place.	31.12.11	269	26 18 0	29	7 17 5	34 15 5
6117	Christian Brothers' Schools, Synge Street.	31.1.12	353	38 16 0	—	—	38 16 0
6344	Christian Brothers' Schools, Westland Row.	31.1.12	496	28 12 0	—	—	28 12 0
6155	O'Brien Institution, .	31.10.11	97	9 14 0	—	—	9 14 0
6113	St. Vincent's Orphanage, .	31.1.12	63	6 19 0	48	16 5 0	22 15 0
	Co. KILDARE:						
6317	Atty: Christian Brothers' Schools.	31.1.12	132	13 4 0	—	—	13 4 0
6346	Atty: St. Mary's School, Convent of Mercy.	30.11.11	19	1 10 0	—	—	1 10 0
6351	Kilcock: Christian Brothers' Schools.	31.1.12	70	5 5 0	—	—	5 5 0
6322	Negastorevan: Christian Brothers' Schools.	31.1.12	85	6 7 6	—	—	6 7 6
6221	Noss: Christian Brothers' Schools.	31.1.12	101	7 11 0	—	—	7 11 0
	Co. KILKENNY:						
6364	Callan: Christian Brothers' Schools.	30.11.11	198	7 13 0	—	—	7 13 0
6059	Kilkenny: Christian Brothers' Schools.	31.1.12	157	11 15 6	—	—	11 15 6
	Co. LOUTH:						
6103	Drogheda: Christian Brothers' Schools, Sunday Gate.	31.10.11	134	13 8 0	—	—	13 8 0
6280	Drogheda: Christian Brothers' Schools, Westgate.	31.10.11	96	9 12 0	—	—	9 12 0
6173	Dundalk: Christian Brothers' Schools.	30.9.11	260	(b) 43 6 8	—	—	43 6 8

(a) 10 months' grant

(b) 20 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS—continued.

No. of School	Name of School	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of scholars under instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
0103	CO. MEADY : Kells : Christian Brothers' Schools.	31.10.10	129	12 18 0	—	—	12 18 0
0176	QUEEN'S COUNTY : Maryborough : Christian Brothers' Schools.	29.2.12	174	(c) 16 16 3	—	—	16 16 3
0262	Portlington : Christian Brothers' Schools.	31.12.11	107	10 14 0	—	—	10 14 0
0361	CO. WEXFORD : Mullinahone : Christian Brothers' Schools.	30.11.11	154	11 11 0	—	—	11 11 0
0104	CO. WEXFORD : Enniscorthy : Christian Brothers' Schools.	31.1.12	214	16 1 0	—	—	16 1 0
0161	New Ross : Christian Brothers' Schools.	31.1.12	149	11 3 6	—	—	11 3 6
0163	Wexford : Christian Brothers' Schools, George's Street.	31.1.12	110	11 0 0	—	—	11 0 0
0341	Wexford : Christian Brothers' Schools, Joseph St.	31.1.12	180	18 0 0	—	—	18 0 0
TOTALS FOR LEINSTER, MUNSTER.		—	7,005	702 8 3	415	126 8 5	838 16 8
0127	CO. CLARE : Ennis : Christian Brothers' Schools.	30.9.11	163	12 3 0	—	—	12 3 0
0353	Ennistymon : Christian Brothers' Schools.	30.9.11	68	6 16 0	—	—	6 16 0
0295	Kilrush : Christian Brothers' Schools.	31.10.11	85	(d) 6 18 2	—	—	6 18 2
0654	CO. COCK : Baltimore : Fishery School.	30.6.11	98	6 19 6	48	10 16 0	17 14 0
0256	Charleville : Christian Brothers' Schools.	31.12.11	49	(d) 5 6 2	—	—	5 6 2
0335	Clonakilty : St. Aloysius Industrial School.	30.9.11	82	8 18 0	—	—	8 18 0
0240	Demerlee : Christian Brothers' Schools.	31.12.11	74	5 11 0	—	—	5 11 0
0157	Fernoy : Christian Brothers' Schools.	31.1.12	148	11 2 0	—	—	11 2 0
0131	Millerton : Christian Brothers' Schools.	31.1.12	165	12 6 0	—	—	12 6 0
0110	Michelsfort : Christian Brothers' Schools.	31.1.12	141	10 11 6	—	—	10 11 6
0280	Upson : Domesfort Industrial School.	31.12.11	186	18 12 0	40	16 8 5	34 15 5
0228	Youghal : Christian Brothers' Schools.	31.1.12	186	13 19 0	—	—	13 19 0
0392	CO. DUNDALK or COCK : Christian Brothers' Schools, Marney Street.	31.5.11	158	11 17 0	30	5 1 4	16 18 4
0013	Christian Brothers' Schools, Our Lady's Mount.	31.5.11	488	48 16 0	83	17 5 8	66 1 8
0034	Christian Brothers' Schools, Sullivan's Quay.	31.5.11	282	25 16 0	30	7 1 0	32 17 0
0034	Greenmount Industrial School.	31.5.11	143	14 6 0	40	9 7 6	23 13 6
0104	CO. KERRY : Dingle : Christian Brothers' Schools.	31.1.12	171	12 16 6	—	—	12 16 6
0179	Trillick : Christian Brothers' Schools.	31.1.12	200	20 0 0	—	—	20 0 0
0349	Trillick : St. Joseph's Industrial School.	31.1.12	100	10 0 0	20	6 13 0	16 13 0

(c) 10 months' grant.

(d) 13 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—*continued.*

No. of School.	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction
			Average Attendance.	Amount of Grant.	No of scholars under instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6334	Co. LAMERICK : Doon : Christian Brothers' Schools.	30.11.11	53	5 6 9	—	—	5 6 9
6335	Glun : District Industrial School.	30.11.11	111	11 2 9	41	12 19 0	24 1 0
6365	Co. BOROUGH OF LAMERICK : Christian Brothers' Schools, St. John's.	30.11.11	189	18 12 0	—	—	18 12 0
6364	Christian Brothers' Schools, St. Mary's.	30.11.11	207	20 14 0	—	—	20 14 0
6363	Christian Brothers' Schools, St. Munchin's.	30.11.11	115	8 12 0	—	—	8 12 0
6160	Christian Brothers' Schools, Sexton Street.	30.11.11	360	28 10 0	—	—	28 10 0
6336	Industrial School, Sexton Street.	30.11.11	168	16 16 0	43	19 6 5	36 2 5
6944	Co. TIPPERARY : Carrick-on-Suir : Christian Brothers' Schools, St. Mary's.	31.12.11	110	11 0 0	—	—	11 0 0
6161	Carrick-on-Suir : Christian Brothers' Schools, Mount St. Nicholas.	31.12.11	110	11 0 0	—	—	11 0 0
6390	Carrick-on-Suir : Convent of Mercy.	31.12.11	24	2 8 0	—	—	2 8 0
6361	Cashel : Christian Brothers' Schools.	31.12.11	61	5 1 0	—	—	5 1 0
6294	Coomel : Christian Brothers' Schools, St. Mary's.	31.12.11	141	10 11 6	—	—	10 11 6
6134	Coomel : Christian Brothers' Schools, SS. Peter & Paul.	31.12.11	167	11 15 6	—	—	11 15 6
6934	Coomel : St. Joseph's Industrial School.	30.6.11	142	7 2 0	42	8 12 4	15 14 4
6279	Ennagh : Christian Brothers' Schools.	31.12.11	106	12 9 0	—	—	12 9 0
6166	Thurles : Christian Brothers' Schools.	31.12.11	209	15 13 6	—	—	15 13 6
6183	Tipperary : Christian Brothers' Schools.	30.11.11	129	9 13 6	—	—	9 13 6
6214	Co. WATERFORD : Dunmarvan : Christian Brothers' Schools.	31.12.11	173	12 19 6	—	—	12 19 6
6204	Lismore : Christian Brothers' Schools.	31.12.11	82	6 3 0	—	—	6 3 0
6291	Tramore : Christian Brothers' Schools.	31.12.11	71	5 6 6	—	—	5 6 6
6118	Co. BOROUGH OF WATERFORD : Christian Brothers' Schools, Mount Zion.	31.12.11	383	25 14 6	—	—	25 14 6
6293	Christian Brothers' Schools, St. John's.	31.12.11	196	14 14 0	—	—	14 14 0
6292	Christian Brothers' Schools, St. Patrick's.	31.12.11	90	6 15 0	—	—	6 15 0
TOTALS FOR MUNSTER		—	6,430	541 18 10	422	113 6 8	655 6 8
ULSTER.							
6573	Co. BOROUGH OF BELFAST : Balmoral Industrial School.	30.9.11	323	24 4 6	101	22 6 0	26 10 6
6298	Christian Brothers' Schools, St. Malachy's.	30.9.11	121	12 2 0	—	—	12 2 0
6080	Christian Brothers' Schools, St. Mary's.	30.9.11	137	13 14 0	—	—	13 14 0
6299	Christian Brothers' Schools, St. Patrick's.	30.9.11	180	18 0 0	—	—	18 0 0
6930	Malone Protestant Reformatory.	30.9.11	102	10 4 0	70	27 18 5	38 2 5
7013	Milntown : St. Patrick's Industrial School.	30.9.11	137	10 5 6	27	9 0 2	19 5 6
6290	Co. ARMAUGH : Armagh : Christian Brothers' Schools.	30.9.11	100	10 12 0	—	—	10 12 0

TABLE IV.—LIST OF PRIMARY SCHOOLS.—*continued.*

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of scholars under Instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
4903	Co. DUBLIN : Killybegs : St. Columba's Industrial School.	31.5.11	137	13 14 0	48	29 1 10	42 15 10
4171	Co. DOWN : Newry : Christian Brothers' School.	30.9.11	233	(c) 17 9 6	—	—	17 9 6
4088	Co. DORSET OF LONDON- DREY : Christian Brothers' Schools, Brow-of-the-Hill.	31.1.12	249	15 0 0	—	—	15 0 0
4196	Co. MONAGHAN : Monaghan : Christian Brothers' Schools.	30.11.11	115	11 10 0	—	—	11 10 0
4189	Co. TYRONE : Omagh : Christian Brothers' School.	31.12.11	87	(f) 10 17 6	—	—	10 17 6
TOTALS FOR ULSTER,		—	1,878	167 13 0	246	98 6 5	265 19 5
CONNAUGHT.							
6337	Co. GALWAY : Galway : Salthill Industrial School.	31.10.11	197	19 14 0	78	16 1 0	35 15 0
6326	Letterfrack : St. Joseph's Industrial School.	30.9.11	141	14 8 0	50	17 12 9	32 0 9
6220	Tuam : Christian Brothers' School.	31.5.11	124	(g) 6 4 0	21	5 11 2	11 15 2
6332	Co. MAYO : Ballinrobe : Christian Brothers' School.	30.9.11	90	6 15 0	—	—	6 15 0
6273	Westport : Christian Brothers' School.	30.9.11	153	15 8 0	—	—	15 8 0
TOTALS FOR CONNAUGHT		—	708	62 7 0	149	39 4 11	101 11 11
(c) 9 months' grant. (f) 15 months' grant. (g) 8 months' grant.							
SUMMARY.							
TOTALS FOR LEINSTER (38 Schools),			7,005	702 8 3	415	136 8 5	838 16 8
TOTALS FOR MUNSTER (42 Schools),			4,439	541 18 10	422	113 6 8	655 5 6
TOTALS FOR ULSTER (12 Schools),			1,878	167 13 0	246	98 6 5	265 19 5
TOTALS FOR CONNAUGHT (5 Schools),			708	62 7 0	149	39 4 11	101 11 11
TOTALS FOR IRELAND (97 Schools),			16,021	1,474 7 1	1,232	387 6 5	1,861 13 6

TABLE V.—STATEMENT showing the OCCUPATIONS of STUDENTS attending Schools and Classes conducted under the conditions of Schemes of Technical Instruction in Non-Agricultural Subjects.

URBAN SCHEMES.

LIMERICK.

	Dublin.	Rathfriland and Rathgar.	Pembroke.	Kingstown.	Drogheda.	Wexford.	Blackrock.	May.	Athlone.	New Ross.	Enniscorthy.	Trillick and Dungannon.
Number of individual students enrolled.	2,601	768	597	478	310	149	253	137	210	172	143	1,281
Number enrolled in:—												
Preparatory Course Classes.	177	75	43	27	39	22	51	33	65	33	36	61
Commercial Classes (Including Languages Classes).	915	490	111	98	111	67	97	13	86	39	47	1,008
Science (Pure and Applied) and Mathematics Classes.	978	—	243	59	80	6	25	4	—	14	23	1,429
Handicraft Classes.	23	—	54	19	—	3	17	12	19	7	13	281
Domestic Science Classes.	446	293	132	243	133	36	61	75	94	62	69	1,007
Art Classes.	65	—	14	45	45	54	25	—	8	21	25	289
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn Thread Work, &c.	—	—	—	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.												
Young Men.												
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	—	—	—	17	3	1	4	10	15	4	1	—
Coach and Car Builders.	99	—	12	8	16	—	—	11	5	10	10	—
Engineers, Workers in Metal, Draughtsmen, &c.	11	—	—	—	—	—	—	—	1	—	—	—
Architects, Surveyors, Civil Engineers, &c.	194	—	34	1	1	8	3	4	5	3	4	—
Electrical Engineers, Scientific Instrument Makers, &c.	30	2	13	1	—	—	1	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	85	—	14	—	2	—	1	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	62	1	1	—	1	1	—	—	6	—	3	—
Painters, Decorators, &c.	1	—	6	—	15	—	—	—	5	—	—	—
Plumbers, Gasfitters, &c.	33	—	—	2	4	4	—	—	—	1	7	—
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	44	—	3	4	4	—	2	—	1	1	—	—
Chemists, Analysts, Druggists, &c.	23	—	—	—	2	—	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.	56	2	5	—	—	—	—	—	—	—	—	—
Clerks in Commercial Offices.	45	19	23	4	11	9	4	—	10	19	27	—
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	219	156	42	5	35	—	19	1	6	3	4	—
Teachers, Assistant Teachers, Pupil Teachers, &c.	113	111	11	4	—	6	7	2	1	—	—	—
Students (University, Law, Medical), Occupations not included in the above Classes.	33	5	1	—	2	4	5	4	—	3	—	—
Boys just left School or College.	64	1	—	—	2	—	2	—	—	—	—	—
Boys still in attendance at School or College.	399	9	120	16	7	8	12	—	4	16	12	—
No occupation stated.	2	—	3	14	12	—	8	14	6	—	—	—
	42	2	26	—	6	4	6	9	7	7	2	—
	191	34	24	12	8	1	6	—	1	—	—	—
Total Number of Young Men.	1,744	312	350	90	133	48	80	55	72	79	89	—
Young Women.												
Persons engaged in Farming occupations, Domestic Servants, &c.	—	—	—	—	—	—	—	—	—	2	—	—
Printing Trades.	16	30	9	52	21	—	23	27	6	15	19	—
Dressmakers, Milliners, &c.	3	—	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	58	8	11	6	16	3	6	1	2	7	3	—
Factory Workers not included in above.	1	—	1	—	30	—	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, Springing, Drawn Thread Work, &c.	11	18	—	18	—	—	3	—	—	—	—	—
Saleswomen, Shopkeepers, &c.	8	1	—	1	—	—	—	—	—	8	—	—
Clerks, Cashiers, Civil Servants, &c.	63	16	11	9	91	8	9	12	15	4	—	—
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), &c.	150	80	27	23	7	16	4	1	8	—	—	—
Occupations not included in above Classes.	68	83	13	50	19	26	16	4	10	7	—	—
Girls just left School or College.	26	—	—	—	—	—	1	—	—	—	—	—
Girls still in attendance at School or College.	43	6	14	2	10	10	1	—	19	24	30	—
No occupation stated.	46	36	21	30	5	15	27	12	50	26	3	—
	362	258	134	292	18	23	49	—	5	—	—	—
Total Number of Young Women.	857	656	247	388	177	101	173	82	133	63	82	—
Total Number of Students.	2,601	768	597	478	310	149	253	137	210	172	143	—

TABLE V.—continued.
 URBAN SCHEMES—continued.
 MUNSTER AND CONNAUGHT.

	Cork.	Limerick.	Waterford.	Clonmel.	Trillick.	Queensdown.	Totals for Munster.	Galway.	Sligo.	Totals for Connaught.
Number of individual students enrolled, Number enrolled in :—	1,755	830	512	319	409	111	8,942	294	427	721
Preparatory Course Classes, . . .	245	114	39	64	93	—	555	59	78	137
Commercial Classes (including Lan- guage Classes), . . .	308	143	147	86	226	36	951	59	122	181
Science (Pure and Applied) and Mathe- matics Classes, . . .	464	200	112	68	39	56	885	45	102	147
Handicraft Classes, . . .	57	—	23	—	39	14	133	13	27	40
Domestic Science Classes, . . .	417	250	130	114	131	—	1,092	74	142	216
Art Classes, . . .	159	131	63	30	70	7	460	44	66	110
Classes in Lace and Crochet Making, Embroidery, Spinning, Drawn- Thread Work, &c., . . .	183	65	21	47	—	—	288	—	—	—
OCCUPATIONS OF STUDENTS.										
Young Men.										
Persons engaged in Farming Occupations, .	20	2	1	—	14	—	27	2	1	3
Building Trades, including Workers in Wood, &c., . . .	192	48	22	18	23	7	215	26	13	39
Cash and Car Builders, Engineers, Workers in Metal, Draughtsmen, &c., . . .	1	6	2	19	—	—	29	—	2	2
Architects, Surveyors, Civil Engineers, &c., .	83	43	2	10	2	33	199	—	6	6
Makers, &c., . . .	25	3	—	1	3	—	32	—	—	—
Trades Involving Applied Art—Jewellers, Printers, &c., . . .	32	7	—	—	—	10	49	—	1	1
Printing Trades—Compositors, Lithographers, &c., . . .	34	4	—	1	3	—	42	2	7	9
Textile Industries—Designers, Weavers, &c., .	5	21	—	—	1	—	27	3	—	3
Painters, Decorators, &c., . . .	24	16	—	1	1	—	42	—	16	16
Plumbers, Gasfitters, &c., . . .	24	1	16	2	—	—	43	—	6	6
Trades Involving Applied Art—Jewellers, Parasol Makers, &c., . . .	22	3	8	2	1	—	36	2	14	16
Chemists, Analysts, Druggists, &c., . . .	22	10	10	—	—	—	42	—	1	1
Salesmen, Shopkeepers, Warehousemen, &c.,	30	20	10	11	15	2	128	27	19	46
Clerks in Commercial Offices, . . .	176	68	28	9	52	11	344	24	22	46
Clerks in Banks, Civil Service, Law, As- surance, and Accountants' Offices, . . .	47	12	24	5	15	—	113	—	—	—
Teachers, Assistant Teachers, Pupil Teachers, &c., . . .	28	29	13	5	12	—	80	20	16	36
Students (University, Law, Medical), . . .	—	3	1	—	2	—	6	20	5	25
Occupations not included in the above Classes, . . .	85	49	12	11	4	—	161	8	5	13
Boys just left School or College, . . .	46	14	2	4	8	—	74	6	5	11
Boys still in attendance at School or College, No occupation stated, . . .	47	34	21	12	5	3	112	19	26	38
	27	6	23	5	—	2	63	—	2	2
Total Number of Young Men, . . .	935	380	212	116	167	68	1,878	169	167	319
Young Women.										
Persons engaged in Farming Occupations, .	6	—	—	—	10	—	16	—	—	—
Domestic Servants, . . .	41	9	43	19	34	—	136	—	—	—
Printing Trades, . . .	—	—	—	—	—	—	—	8	22	30
Dressmakers, Milliners, &c., . . .	26	16	5	15	5	—	67	2	22	24
Textile Industries—Designers, Weavers, &c., .	—	—	—	—	—	—	—	—	—	—
Factory Workers not included in above Classes, . . .	—	5	—	—	—	—	5	—	5	5
Workers in Lace, Crochet, Embroidery, Spinning, Drawn-Thread Work, &c., . . .	158	69	—	47	7	—	281	—	2	2
Saleswomen, Shopkeepers, &c., . . .	58	20	16	20	22	10	152	4	11	15
Clerks, Cashiers, Civil Servants, &c., . . .	55	24	12	11	22	1	125	14	10	24
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), . . .	28	43	41	5	55	3	178	33	44	77
Occupations not included in above Classes, .	—	0	—	—	3	—	9	1	4	5
Girls just left School or College, . . .	21	44	13	19	14	4	120	2	29	101
Girls still in attendance at School or College, No occupation stated, . . .	130	40	—	27	31	—	234	—	—	—
	40	12	27	14	29	15	137	—	20	20
	257	160	132	20	9	10	594	78	21	99
Total Number of Young Women, . . .	820	456	300	203	242	43	2,061	143	260	402
Total Number of Students, . . .	1,755	836	512	319	409	111	8,942	294	427	721

TABLE V—continued.—URBAN

	Belfast.	Londonderry.	Newry.	Lurgan (Municipal Scheme).	Lurgan (Convent Scheme).	Ballymena.	Portadown.	Newtownards.	Armagh.	Coleraine.
Number of individual students enrolled.	6,498	627	325	304	129	501	394	305	185	226
Number enrolled in:—										
Preparatory Course Classes.	1,523	64	60	76	20	43	20	57	23	54
Commercial Classes (including Languages Classes).	1,714	99	130	61	24	182	142	65	95	86
Science (Pure and Applied) and Mathematics Classes.	951	93	34	70	—	95	64	44	14	44
Handicraft Classes.	588	21	13	—	—	8	—	—	—	9
Domestic Science Classes.	1,549	263	119	112	69	184	121	130	43	170
Art Classes.	451	80	43	13	16	67	47	9	20	35
Classes in Lace and Crochet Making, Embroidery, Sprigging, Drawn-Thread Work, &c.	24	—	—	—	—	19	—	—	—	—
Other Classes.	639	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.										
<i>Young Men.</i>										
Persons engaged in Farming Occupations.	3	2	3	2	—	10	—	—	8	14
Building Trades, including Workers in Wood, &c.	169	15	21	5	—	9	2	7	10	4
Coach and Car Builders.	5	1	—	—	—	2	—	2	—	—
Engineers, Workers in Metal, Draughtsmen, &c.	749	39	16	13	—	3	6	18	—	13
Architects, Surveyors, Civil Engineers, &c.	26	9	2	1	—	1	2	1	4	4
Electrical Engineers, Scientific Instrument Makers, &c.	77	2	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	130	—	2	—	—	1	—	—	—	3
Textile Industries—Designers, Weavers, &c.	468	—	2	29	4	2	18	18	4	8
Painters, Decorators, &c.	51	3	2	—	1	4	7	—	4	1
Plumbers, Gasfitters, &c.	45	10	—	—	—	—	—	—	3	—
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	93	—	4	2	—	1	—	2	—	1
Chemists, Analysts, Druggists, &c.	95	5	3	4	—	6	3	2	1	2
Salesmen, Shopkeepers, Warehousemen, &c.	279	20	14	12	3	32	14	4	15	21
Clerks in Commercial Offices.	791	39	12	35	2	12	26	14	5	12
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	246	11	2	3	—	13	4	1	6	9
Teachers, Assistant Teachers, Pupil Teachers, &c.	115	17	12	1	—	25	18	3	2	7
Students (University, Law, Medical).	43	—	1	—	—	1	—	—	5	2
Occupations not included in the above Classes.	147	34	2	9	—	18	30	29	2	6
Boys just left School or College.	—	—	—	2	—	8	—	—	—	5
Boys still in attendance at School or College.	23	1	—	9	5	—	7	3	10	19
No occupation stated.	175	8	7	10	—	9	10	6	—	4
Total Number of Young Men.	3,686	297	110	138	15	162	142	113	77	133
<i>Young Women.</i>										
Persons engaged in Farming Occupations.	—	—	3	1	—	1	—	4	5	12
Domestic Servants.	115	19	7	9	6	16	16	6	10	17
Printing Trades.	8	—	2	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	169	10	35	5	3	19	8	6	13	11
Textile Industries—Designers, Weavers, &c.	213	—	33	3	1	27	17	5	2	3
Factory Workers not included in above.	231	10	8	24	57	26	8	84	—	2
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn-Thread Work, &c.	29	—	3	2	—	1	—	—	—	1
Saleswomen, Shopkeepers, &c.	39	12	16	10	2	10	13	12	14	17
Clerks, Cashiers, Civil Servants, &c.	377	36	29	16	2	32	15	22	12	14
Teachers, Assistant Teachers, Pupil Teachers.	266	60	29	23	13	63	47	18	14	31
Students (University, Medical).	55	1	—	—	—	—	—	—	—	5
Occupations not included in above Classes.	34	2	12	10	4	—	1	27	—	3
Girls just left School or College.	—	1	—	—	7	57	26	—	3	9
Girls still in attendance at School or College.	67	4	—	14	11	2	24	—	19	1
No occupation stated.	1,168	165	43	49	8	85	78	10	32	43
Total Number of Young Women.	2,812	320	215	166	114	339	252	192	118	147
Total Number of Students.	6,498	627	325	304	129	501	394	305	195	226

SCHEMES—continued.—ULSTER.

Larne.	Bangor.	Banbridge.	Carrickfergus.	Holywood.	Ballymoney (Johan Urban and Rural).	Down.	Warrenpoint.	Totals for Ulster.	
406	299	347	269	113	218	100	74	11,274	Number of individual students enrolled
35	45	28	52	11	17	11	24	2,162	Number enrolled in:—
116	81	69	56	31	42	34	10	3,081	Preparatory Course Classes
									Commercial Classes (including Languages Classes)
82	19	27	42	11	22	—	10	1,622	Science (Pure and Applied) and Mathematics Classes
26	2	—	15	5	56	13	—	755	Handicraft Classes
131	165	246	99	48	75	42	30	2,826	Domestic Science Classes
19	17	6	11	9	—	—	—	344	Art Classes
44	29	—	—	—	—	—	—	116	Classes in Lace and Crochet Making
—	—	—	—	—	—	—	—	—	Embroidery, Springing, Drawn-Thread Work, &c.
—	—	—	—	—	—	—	—	639	Other Classes
									OCCUPATIONS OF STUDENTS.
									Young Men.
3	2	2	3	1	17	1	—	67	Persons engaged in Farming Occupations
16	2	1	16	1	13	—	14	305	Building Trades, including Workers in Wood, &c.
—	—	—	—	—	—	—	—	10	Cosch and Car Builders
19	1	1	16	2	3	—	—	895	Engineers, Workers in Metal, Draughtsmen, &c.
—	1	—	—	—	—	—	—	61	Architects, Surveyors, Civil Engineers, &c.
2	—	—	2	—	—	—	—	85	Electrical Engineers, Scientific Instrument Makers, &c.
—	2	1	1	1	—	1	—	148	Printing Trades—Compositors, Lithographers, &c.
—	7	16	5	—	2	3	—	524	Textile Industries—Designers, Weavers, &c.
—	1	—	7	—	—	—	1	83	Painters, Decorators, &c.
3	2	1	—	—	—	—	—	65	Plumbers, Gasfitters, &c.
—	—	—	—	—	—	—	—	169	Trades involving Applied Art—Jewellers, Furniture Makers, &c.
—	2	2	1	2	1	—	—	135	Chemists, Analysts, Druggists, &c.
—	2	2	2	2	14	6	1	477	Salesmen, Shopkeepers, Warehousemen, &c.
—	12	16	12	12	2	1	—	1,614	Clerks in Commercial Offices
—	3	10	2	2	14	1	—	332	Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.
12	1	2	4	—	3	2	1	225	Teachers, Assistant Teachers, Pupil Teachers, &c.
3	2	—	1	—	—	—	—	59	Students (University, Law, Medical)
5	1	4	10	7	13	7	4	323	Occupations not included in the above Classes.
9	3	1	4	—	1	—	1	34	Boys just left School or College
6	3	4	16	1	—	6	2	119	Boys still in attendance at School or College.
—	—	—	—	3	12	6	7	269	No occupation stated.
120	67	62	113	39	86	34	31	5,344	Total Number of Young Men
									Young Women.
15	—	—	7	2	21	—	—	72	Persons engaged in Farming Occupations
23	21	2	1	16	5	3	6	304	Domestic Servants
—	—	—	1	1	—	—	—	17	Printing Trades
13	4	7	2	3	12	3	4	216	Dressmakers, Milliners, &c.
16	—	109	1	2	—	—	—	430	Textile Industries—Designers, Weavers, &c.
6	—	—	1	—	—	10	—	467	Factory Workers not included in above
—	7	—	—	—	—	—	—	84	Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.
24	7	16	7	3	11	3	3	279	Saleswomen, Shopkeepers, &c.
29	12	6	21	5	9	2	—	630	Clerks, Cashiers, Civil Servants, &c.
43	8	28	19	4	38	9	2	715	Teachers, Assistant Teachers, Pupil Teacher's
7	—	—	—	—	1	—	—	69	Students (University, Medical)
33	3	37	9	2	15	—	22	180	Occupations not included in above Classes
18	6	4	16	—	1	6	—	168	Girls just left School or College
12	82	76	39	6	10	8	2	365	Girls still in attendance at School or College
46	22	—	25	31	—	22	4	1,279	No occupation stated.
276	242	285	140	74	123	66	43	5,930	Total Number of Young Women.
406	299	347	269	113	218	100	74	11,274	Total Number of Students.

TABLE V.—continued.

COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION.

LIMERICK.

	Carlow.	Dublin.	Kildare.	Kilkenny.	King's County.	Longford.	Louth.	Monaghan.	Queen's Co.	Westmeath.	Wexford.	Wicklow.	Totals for Limerick.
Number of individual students enrolled.	267	22	198	295	273	25	355	175	92	179	—	207	2,002
Number enrolled in													
Preparatory Course Classes.	—	—	28	78	74	—	58	31	20	28	—	54	283
Commercial Classes (including Language Classes).	99	—	65	30	69	—	123	75	32	51	—	18	445
Science (Pure and Applied) and Mathematics Classes.	—	—	22	9	53	—	54	14	—	19	—	45	255
Handicraft Classes.	35	—	14	44	20	—	18	—	—	13	—	5	149
Domestic Science Classes.	194	—	97	109	49	—	92	55	50	61	—	82	719
Art Classes.	—	—	10	38	8	—	56	—	—	—	—	13	225
Classes in Lace and Crochet Making, Embroidery, Spinning, Drawn-Thread Work, &c.	—	22	—	—	—	25	—	—	—	—	—	—	47
OCCUPATIONS OF STUDENTS.													
Young Men.													
Persons engaged in Farming Occupations.	5	—	19	4	8	—	1	—	7	1	—	1	37
Building Trades, including Workers in Wood, &c.	35	—	13	12	12	—	12	10	1	11	—	17	129
Coach and Car Builders.	11	—	—	1	2	—	—	—	—	—	—	—	16
Engineers, Workers in Metal, Draughtsmen, &c.	—	—	1	8	4	—	28	—	—	3	—	8	42
Architects, Surveyors, Civil Engineers, &c.	—	—	2	—	1	—	1	—	—	1	—	—	5
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	2	1	—	—	1	—	—	—	—	1	5
Printing Trades—Compositors, Lithographers, &c.	9	—	—	—	—	—	3	—	—	—	—	—	12
Textile Industries—Designers, Weavers, &c.	—	—	—	2	—	—	—	—	—	—	—	—	2
Painters, Decorators, &c.	—	—	—	13	6	—	3	—	—	—	—	—	25
Plumbers, Gasfitters, &c.	—	—	1	1	1	—	2	—	—	—	—	—	5
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	1	1	5	—	1	12	1	—	—	—	11
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—	—	—	—	1	—	—	3
Salesmen, Shopkeepers, Warehousemen, &c.	—	—	7	11	34	—	15	19	5	19	—	3	104
Clerks in Commercial Offices.	40	—	6	1	38	—	25	3	—	2	—	6	125
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	19	—	10	—	2	—	9	6	2	4	—	4	54
Teachers, Assistant Teachers, Pupil Teachers, &c.	—	—	3	14	11	—	13	3	1	6	—	4	55
Students (University, Law, Medical).	—	—	—	—	—	—	2	—	—	—	—	—	2
Occupations not included in the above Classes.	10	—	4	5	—	—	8	9	3	5	—	9	63
Boys just left School or College.	19	—	1	—	—	—	6	—	1	3	—	—	31
Boys still in attendance at School or College.	—	—	16	10	32	—	8	19	1	23	—	85	141
No occupation stated.	14	—	—	3	34	—	9	5	—	5	—	5	55
Total Number of Young Men.	153	—	77	87	190	—	148	72	22	84	—	98	921
Young Women.													
Persons engaged in Farming Occupations.	—	—	—	1	2	—	—	5	14	—	—	1	22
Domestic Servants.	28	—	11	5	—	—	8	17	7	42	—	11	126
Printing Trades.	—	—	—	1	—	—	—	—	—	—	—	—	1
Dressmakers, Milliners, &c.	3	—	2	—	3	—	8	5	2	4	—	5	31
Textile Industries—Designers, Weavers, &c.	—	—	20	—	—	—	—	1	—	—	—	—	21
Factory Workers not included in above.	50	—	—	—	—	—	5	—	—	—	—	—	55
Workers in Lace, Crochet, Embroidery, Spinning, Drawn-Thread Work, &c.	—	22	—	—	1	25	—	4	—	—	—	—	52
Saleswomen, Shopkeepers, &c.	4	—	6	6	10	—	19	13	4	3	—	3	59
Clerks, Cashiers, Civil Servants, &c.	6	—	13	2	5	—	9	4	1	3	—	3	45
Teachers, Assistant Teachers, Pupil Teachers.	—	—	14	11	5	—	49	6	7	11	—	4	107
Students (University, Medical).	—	—	1	—	—	—	—	—	—	—	—	—	1
Occupations not included in above Classes.	7	—	23	36	—	—	27	10	16	—	—	—	119
Girls just left School or College.	2	—	1	2	—	—	5	—	9	—	—	—	19
Girls still in attendance at School or College.	—	—	30	121	22	—	43	20	10	33	—	41	323
No occupation stated.	3	—	—	23	35	—	42	15	—	5	—	41	163
Total Number of Young Women.	104	22	121	208	83	25	207	103	70	108	—	109	1,169
Total Number of Students.	257	22	198	295	273	25	355	175	92	192	—	207	2,094

TABLE V.—continued.

COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued,
MUNSTER.

	Clare.	Cork.	Kerry.	Limerick.	Tipperary (N. Riding)	Tipperary (S. Riding)	Tipperary (Jt. Urban and Rural).	Waterford.	Totals for Munster.
Number of individual students enrolled,	238	1,356	173	70	218	92	170	163	2,479
Number enrolled in :—									
Preparatory Course Classes,	—	11	—	—	59	—	40	16	126
Commercial Classes (including Languages Classes),	44	426	—	—	—	—	50	—	529
Science (Pure and Applied) and Mathematics Classes,	—	337	38	—	54	—	—	—	429
Handicraft Classes,	48	481	49	—	51	40	15	35	689
Domestic Science Classes,	146	79	30	—	13	15	56	5	332
Art Classes,	—	312	27	—	—	—	—	46	385
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn-Thread Work, &c.	—	33	62	70	62	39	—	41	308
OCCUPATIONS OF STUDENTS.									
Young Men.									
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	21	31	—	—	25	—	4	5	146
	7	117	16	—	15	5	—	12	172
Cow and Car Builders,	—	9	—	—	—	—	—	—	11
Engineers, Workers in Metal, Draughtsmen, &c.	—	49	—	—	—	2	—	—	49
Architects, Surveyors, Civil Engineers, &c.	—	4	—	—	—	—	—	—	4
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	1	—	—	—	—	—	2	3
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—
Painters, Decorators, &c.,	—	8	1	—	—	—	—	6	15
Plumbers, Gasfitters, &c.,	1	7	2	—	—	—	—	—	10
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	—	7	—	—	1	—	—	1	9
Chemists, Analysts, Druggists, &c.,	—	8	—	—	—	—	—	—	8
Salesmen, Shopkeepers, Warehousemen, &c.	4	75	4	—	10	—	17	5	115
Clerks in Commercial Offices,	12	25	2	—	—	4	3	6	52
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	1	12	—	—	12	—	2	1	28
Teachers, Assistant Teachers, Pupil Teachers, &c.	3	44	1	—	11	4	—	9	72
Students (University, Law, Medical),	—	16	—	—	—	—	—	—	16
Occupations not included in the above Classes,	3	41	5	—	20	—	11	20	100
Boys just left School or College,	—	36	—	—	8	—	—	4	48
Boys still in attendance at School or College,	21	399	52	—	12	19	7	17	508
No occupation stated,	—	11	7	—	15	6	16	11	64
Total Number of Young Men,	73	921	90	—	137	40	60	99	1,439
Young Women.									
Persons engaged in Farming Occupations,	48	5	—	15	—	—	—	—	63
Domestic Servants,	10	2	—	1	—	—	6	—	19
Printing Trades,	—	—	—	3	—	—	—	—	3
Dressmakers, Milliners, &c.	1	4	—	—	—	—	4	2	11
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	29	29
Factory Workers not included in above,	—	—	—	—	—	—	24	—	24
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	—	46	68	—	62	—	7	—	173
Saleswomen, Shopkeepers, &c.,	37	36	—	—	—	—	—	1	74
Clerks, Cashiers, Civil Servants, &c.	1	6	—	—	—	—	2	—	9
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	11	56	15	—	19	—	5	—	106
Occupations not included in above Classes,	39	3	—	40	—	—	8	2	92
Girls just left School or College,	—	64	—	—	—	—	1	2	67
Girls still in attendance at School or College,	11	115	5	6	—	13	20	10	136
No occupation stated,	7	81	—	—	29	27	25	—	179
Total Number of Young Women,	165	424	83	70	81	52	110	64	1,049
Total Number of Students,	238	1,355	173	70	218	92	170	163	2,479

TABLE V.—continued
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.
ULSTER.

	Antrim.	Armagh.	Cavan.	Donegal.	Down.	Fermanagh.	Londonderry.	Monaghan.	Tyrone.	Totals for Ulster.
Number of individual students enrolled,	382	45	279	456	—	515	519	350	485	3,091
Number enrolled in:—										
Preparatory Course Classes,	38	—	—	—	—	39	57	48	102	275
Commercial Classes (including Languages Classes),	96	—	—	—	—	53	78	152	150	529
Science (Pure and Applied) and Mathematics Classes,	48	—	—	—	—	7	—	8	80	141
Handicraft Classes,	31	—	—	—	—	—	60	—	74	165
Domestic Science Classes,	193	—	—	—	—	58	190	—	105	546
Art Classes,	—	—	—	—	—	38	39	—	39	106
Classes in Lace and Crochet Making, Embroidery, Sprigging, Drawn-Thread Work, &c.,	—	45	279	456	—	868	95	142	—	1,535
OCCUPATIONS OF STUDENTS.										
Young Men.										
Persons engaged in Farming Occupations,	20	—	—	—	—	4	49	12	45	139
Building Trades, including Workers in Wood, &c.,	14	—	—	—	—	4	5	5	18	46
Coach and Car Builders,	—	—	—	—	—	—	—	—	2	2
Engineers, Workers in Metal, Draughtsmen, &c.,	13	—	—	—	—	2	2	—	6	23
Architects, Surveyors, Civil Engineers, &c.,	—	—	—	—	—	—	1	—	2	3
Electrical Engineers, Scientific Instrument Makers, &c.,	—	—	—	—	—	1	—	—	—	1
Printing Trades—Compositors, Lithographers, &c.,	1	—	—	—	—	2	2	—	—	5
Textile Industries—Designers, Weavers, &c.,	13	—	—	—	—	1	—	—	9	23
Painters, Decorators, &c.,	—	—	—	—	—	1	1	1	2	5
Plumbers, Gasfitters, &c.,	—	—	—	—	—	4	2	2	1	9
Trades involving Applied Art—Jewellers, Furniture Makers, &c.,	—	—	—	—	—	—	1	4	1	6
Chemists, Analysts, Druggists, &c.,	2	—	—	—	—	—	30	—	—	2
Salesmen, Shopkeepers, Warehousemen, &c.,	19	—	—	—	—	29	30	55	64	180
Clerks in Commercial Offices,	14	—	—	—	—	6	2	5	16	48
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices,	5	—	—	—	—	5	6	11	14	41
Teachers, Assistant Teachers, Pupil Teachers, &c.,	4	—	—	—	—	1	7	2	27	41
Students (University, Law, Medical),	—	—	—	—	—	—	—	2	5	7
Occupations not included in the above Classes,	11	—	—	—	—	5	8	3	8	35
Boys just left School or College,	6	—	—	—	—	1	1	2	14	24
Boys still in attendance at School or College,	3	—	—	—	—	3	28	7	18	59
No occupation stated,	—	—	—	—	—	—	11	14	—	25
Total Number of Young Men,	133	—	—	—	—	69	156	111	252	731
Young Women.										
Persons engaged in Farming Occupations,	54	—	—	190	—	1	13	76	12	346
Domestic Servants,	11	—	—	22	—	11	6	—	25	75
Painting Trades,	—	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.,	11	—	—	—	—	2	12	12	4	41
Textile Industries—Designers, Weavers, &c.,	2	—	—	17	—	—	—	—	3	22
Factory Workers not included in above,	—	—	—	135	—	—	—	—	—	135
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn-Thread Work, &c.,	—	45	279	—	—	370	95	26	—	815
Saleswomen, Shopkeepers, &c.,	21	—	—	40	—	10	2	15	22	110
Clerks, Cashiers, Civil Servants, &c.,	11	—	—	—	—	4	6	12	25	58
Teachers, Assistant Teachers, Pupil Teachers,	12	—	—	—	—	19	26	3	27	87
Students (University, Medical),	—	—	—	—	—	—	—	—	10	10
Occupations not included in above Classes,	4	—	—	32	—	8	107	25	—	176
Girls just left School or College,	5	—	—	—	—	12	1	7	25	50
Girls still in attendance at School or College,	41	—	—	20	—	—	30	25	1	177
No occupation stated,	77	—	—	—	—	9	15	28	79	208
Total Number of Young Women,	349	45	279	456	—	446	363	239	233	2,319
Total Number of Students,	382	45	279	456	—	515	519	350	485	3,091

TABLE V.—continued.

COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued,
CONNAUGHT.

	Galway.	Lettin.	Mayo.	Reconmon.	Sligo.	Totals for Connaught.
Number of individual students enrolled,	183	32	451	—	—	666
Number enrolled in:—						
Preparatory Course Classes,	24	—	—	—	—	24
Commercial Classes (including Lan- guage Classes),	62	—	131	—	—	193
Science (Pure and Applied) and Matho- matics Classes,	16	—	—	—	—	16
Handicraft Classes,	14	—	49	—	—	63
Domestic Science Classes,	39	—	39	—	—	119
Art Classes,	—	—	—	—	—	—
Classes in Lace and Crochet Making, Embroidery, Sprigging, Drawn- Thread Work, &c.	28	32	171	—	—	231
OCCUPATIONS OF STUDENTS.						
Young Men.						
Persons engaged in Farming Occupations,	10	—	23	—	—	43
Building Trades, including Workers in Wood, &c.	14	—	1	—	—	15
Coch and Car Builders,	2	—	—	—	—	2
Engineers, Workers in Metal, Draughtsmen, &c.	—	—	—	—	—	—
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—
Painters, Decorators, &c.	—	—	—	—	—	—
Plumbers, Gasfitters, &c.	1	—	—	—	—	1
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.	11	—	27	—	—	38
Clerks in Commercial Offices,	3	—	6	—	—	9
Clerks in Banks, Civil Service, Law, As- surance, and Accountants' Offices,	—	—	—	—	—	—
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	4	—	2	—	—	6
Students (University, Law, Medical),	2	—	—	—	—	2
Occupations not included in the above Classes,	6	—	27	—	—	33
Boys just left School or College,	—	—	—	—	—	—
Boys still in attendance at School or College, No occupation stated,	9	—	42	—	—	51
Total Number of Young Men,	62	—	128	—	—	200
Young Women.						
Persons engaged in Farming Occupations,	28	23	—	—	—	51
Domestic Servants,	6	4	4	—	—	14
Printing Trades,	—	—	—	—	—	—
Dressmakers, Milliners, &c.	4	—	—	—	—	4
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—
Factory Workers not included in above,	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn-Thread Work, &c.	—	—	171	—	—	171
Saleswomen, Shopkeepers, &c.	4	—	7	—	—	11
Clerks, Cashiers, Civil Servants, &c.	—	—	4	—	—	4
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	9	—	5	—	—	14
Students (University, Medical),	1	—	—	—	—	1
Occupations not included in above Classes,	—	—	107	—	—	107
Girls just left School or College,	—	—	—	—	—	—
Girls still in attendance at School or College, No occupation stated,	4	—	15	—	—	19
	65	—	—	—	—	65
Total Number of Young Women,	121	32	313	—	—	466
Total Number of Students,	183	32	451	—	—	666

TABLE V.—continued.
COUNTY SCHEMES—ITINERANT INSTRUCTION.
LEINSTER.

OCCUPATIONS OF STUDENTS.	Carlow.	Dublin.	Kildare.	Kilkenny.	King's Co.	Longford.	Louth.	Meath.	Queen's Co.	Westmeath.	Wexford.	Wicklow.	Totals for Leinster.
<i>Young Men.</i>													
Persons engaged in Farming Occupations,	60	—	34	95	143	29	40	36	43	26	65	41	644
Building Trades, including Workers in Wood,	17	—	3	6	19	9	8	10	3	1	—	—	83
Coach and Car Builders,	—	—	—	—	2	—	—	2	—	—	—	—	4
Engineers, Workers in Metal, Draughtsmen, &c.,	—	—	—	3	1	—	5	—	2	1	—	—	14
Architects, Surveyors, Civil Engineers, &c.,	—	—	—	—	—	1	—	—	—	—	—	—	1
Electrical Engineers, Scientific Instrument Makers, &c.,	—	—	—	—	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.,	—	—	—	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.,	—	—	—	—	—	—	—	—	—	—	—	—	—
Painters, Decorators, &c.,	—	—	—	—	—	—	—	—	—	—	—	—	—
Plumbers, Gasfitters, &c.,	—	—	—	—	2	—	—	—	1	—	—	—	3
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.,	—	—	—	—	4	—	3	—	—	—	—	—	7
Chemists, Analysts, Druggists, &c.,	11	—	—	—	—	—	—	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.,	11	—	3	6	19	3	4	5	27	7	2	2	89
Clerks in Commercial Offices,	—	—	—	—	26	1	1	—	6	—	1	1	37
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices,	—	—	—	—	1	—	—	—	2	—	—	—	3
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	19	—	1	4	15	6	3	5	3	1	4	1	42
Occupations not included in above Classes,	4	—	1	3	—	9	4	15	6	5	19	25	83
Boys just left School or College,	—	—	—	10	—	—	—	—	2	—	—	—	14
Boys still in attendance at School or College,	30	—	2	79	10	45	22	50	26	15	23	46	347
No occupation stated,	—	—	—	3	—	—	3	6	2	—	6	—	20
Total Number of Young Men,	141	—	34	209	236	107	94	129	128	56	155	119	1,401
<i>Young Women.</i>													
Persons engaged in Farming Occupations,	179	121	—	136	54	54	6	135	57	57	216	—	1,005
Domestic Servants,	115	32	16	25	13	7	9	63	21	6	16	1	394
Printing Trades,	—	—	1	—	—	1	—	—	—	—	—	—	1
Dressmakers, Milliners, &c.,	30	—	3	—	9	1	—	9	5	3	—	1	61
Textile Industries—Designers, Weavers, &c.,	—	—	—	—	—	—	—	—	—	—	—	—	—
Factory Workers not included in above,	—	13	—	—	—	1	—	—	12	—	—	—	25
Workers in Lace, Crochet, Embroidery,	—	5	—	—	18	—	—	—	—	—	—	—	23
Springing, Drawn-Thread Work, &c.,	—	—	—	—	—	—	—	—	—	—	—	—	—
Saleswomen, Shopkeepers, &c.,	—	12	5	9	8	9	2	18	43	6	2	—	134
Clerks, Cashiers, Civil Servants, &c.,	9	—	2	1	5	—	—	6	2	1	—	1	27
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	39	6	4	10	5	3	2	13	39	3	10	7	132
Occupations not included in above Classes,	20	44	69	3	—	23	47	46	19	—	13	34	315
Girls just left School or College,	—	7	5	2	—	—	5	—	9	—	—	11	39
Girls still in attendance at School or College,	31	31	6	25	14	4	9	73	35	23	26	12	290
No occupation stated,	—	—	—	29	25	—	1	6	4	6	46	—	121
Total Number of Young Women,	414	270	113	246	151	107	83	374	237	109	331	67	2,361
Total Number of Students,	555	276	147	446	389	210	177	503	365	165	486	186	2,963

TABLE V.—continued,
COUNTY SCHEMES—ITINERANT INSTRUCTION.—continued.
MUNSTER.

OCCUPATIONS OF STUDENTS.	Clare.	Cork.	Kerry.	Limerick.	Tipperary (N.R.)	Tipperary (S.R.)	Tipperary (Joint, Urban and Rural).	Waterford.	Total for Munster.
<i>Young Men.</i>									
Persons engaged in Farming Occupations,	45	77	60	—	4	—	24	66	276
Building Trades, including Workers in Wood, &c.	8	16	9	—	—	—	1	5	39
Coach and Car Builders,	—	—	4	—	—	—	—	—	4
Engineers, Workers in Metal, Draughtsmen, &c.	—	2	—	—	—	—	—	1	3
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	1	—	—	—	—	—	—	—	1
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	8	—	—	—	—	—	—	8
Painters, Decorators, &c.	—	—	—	—	—	—	—	—	—
Plumbers, Gasfitters, &c.	—	—	—	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	3	—	—	—	—	—	—	3
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.	12	9	2	—	—	—	1	5	29
Clerks in Commercial Offices,	2	4	—	—	—	—	—	2	8
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices,	—	2	1	—	—	—	—	—	3
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	3	9	6	—	—	—	1	6	25
Occupations not included in above Classes,	10	14	31	—	—	—	3	25	73
Boys just left School or College,	—	43	—	—	—	—	—	—	43
Boys still in attendance at School or College,	57	120	56	—	—	—	3	112	350
No occupation stated,	—	6	3	—	—	—	—	2	11
Total Number of Young Men,	138	313	164	—	10	—	33	224	862
<i>Young Women.</i>									
Persons engaged in Farming Occupations,	198	233	612	293	146	174	—	—	1,656
Domestic Servants,	5	79	27	24	34	40	2	—	202
Printing Trades,	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	4	22	4	8	—	5	1	—	44
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—
Factory Workers not included in above,	—	—	—	2	—	—	—	—	2
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	—	83	1	1	—	—	—	—	85
Salewomen, Shopkeepers, &c.	25	134	77	46	23	4	1	—	319
Clerks, Cashiers, Civil Servants, &c.	5	4	5	2	—	—	—	—	18
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	21	26	22	15	7	12	—	—	103
Occupations not included in above Classes,	34	13	134	30	10	32	32	—	285
Girls just left School or College,	1	10	46	21	—	—	21	—	89
Girls still in attendance at School or College,	37	102	73	128	5	173	36	—	554
No occupation stated,	2	183	39	22	10	24	10	—	290
Total Number of Young Women,	332	883	1,040	592	257	464	103	—	3,651
Total Number of Students,	470	1,196	1,204	592	267	464	136	224	4,533

TABLE V.—continued.
COUNTY SCHEMES—ITINERANT INSTRUCTION—continued.
ULSTER.

OCCUPATIONS OF STUDENTS.	Antrim.	Armagh.	Cavan.	Down.	Down.	Fermanagh.	Londonderry.	Monaghan.	Tyrone.	Totals for Ulster.
<i>Young Men.</i>										
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	25	72	145	19	138	104	13	177	86	781
Coach and Car Builders.	—	—	—	—	—	—	—	—	—	2
Engineers, Workers in Metal, Draughtsmen, &c.	—	—	1	—	—	—	—	—	—	9
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	—	1	—	1
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	2	2
Textile Industries—Designers, Weavers, &c.	—	2	—	—	8	—	2	—	6	19
Painters, Decorators, &c.	—	—	—	8	—	—	—	—	—	3
Plumbers, Gasfitters, &c.	—	—	—	—	—	2	—	—	—	2
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—	—	2	—	2
Chemists, Analysts, Druggists, &c.	1	—	—	—	—	—	1	—	—	2
Salesmen, Shopkeepers, Warehousemen, &c.	—	1	6	12	6	1	1	19	11	56
Clerks in Commercial Offices.	—	—	1	—	4	—	3	1	1	10
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	1	1	—	—	—	1	—	1	1	5
Teachers, Assistant Teachers, Pupil Teachers.	4	1	5	19	9	3	3	1	4	49
Students (University, Law, Medical).	—	—	—	—	—	—	—	—	—	—
Occupations not included in above Classes.	6	2	1	2	12	5	2	15	—	49
Boys just left School or College.	—	14	—	14	—	13	—	82	1	124
Boys still in attendance at School or College.	22	53	39	25	111	26	31	—	46	353
No occupation stated.	2	1	—	—	—	—	—	3	17	128
Total Number of Young Men.	65	154	202	101	300	162	57	304	195	1,549
<i>Young Women.</i>										
Persons engaged in Farming Occupations.	91	—	153	183	225	26	26	—	32	736
Domestic Servants.	22	18	9	203	36	1	12	8	1	319
Printing Trades.	—	—	—	35	—	—	—	—	—	35
Dressmakers, Milliners, &c.	2	10	1	—	5	3	22	4	—	47
Textile Industries—Designers, Weavers, &c.	19	29	—	44	—	—	—	—	—	92
Factory Workers not included in above.	1	8	—	30	59	—	—	—	—	128
Workers in Lace, Crochet, Embroidery.	—	—	—	—	—	7	1	—	—	8
Spinning, Drawn-Thread Work, &c.	—	—	—	—	—	—	—	—	—	—
Saleswomen, Shopkeepers, &c.	9	1	13	32	27	8	5	3	—	94
Clerks, Cashiers, Civil Servants, &c.	6	1	1	7	2	2	—	—	—	19
Teachers, Assistant Teachers, Pupil Teachers.	27	23	9	34	39	6	14	6	4	162
Students (University, Medical).	—	—	7	—	—	—	—	—	—	7
Occupations not included in above Classes.	31	2	2	71	30	2	131	6	—	275
Girls just left School or College.	17	16	6	24	—	4	—	—	—	67
Girls still in attendance at School or College.	18	138	14	57	7	3	16	3	7	268
No occupation stated.	88	146	11	58	43	—	6	10	5	367
Total Number of Young Women.	331	392	226	778	503	62	233	45	49	2,019
Total Number of Students.	396	546	428	579	303	224	290	349	244	4,169

TABLE V.—*continued*,
COUNTY SCHEMES—ITINERANT INSTRUCTION—*continued*,
CONNAUGHT.

OCCUPATIONS OF STUDENTS.	Galway.	Leitrim.	Mayo.	Roscommon.	Sligo.	Totals for Connaught.
<i>Young Men.</i>						
Persons engaged in Farming Occupations,	—	77	104	154	110	445
Building Trades, including Workers in Wood, &c.	—	—	1	20	5	26
Coach and Car Builders,	—	—	—	—	—	—
Engineers, Workers in Metal, Draughtsmen, &c.	—	—	—	—	—	—
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers &c.	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.,	—	—	—	—	—	—
Painters, Decorators, &c.,	—	—	—	—	—	—
Plumbers, Gasfitters, &c.,	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.,	—	—	11	69	—	80
Clerks in Commercial Offices,	—	—	—	13	—	13
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices,	—	—	1	—	—	1
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	—	2	5	6	10	23
Occupations not included in above Classes,	—	3	7	7	35	52
Boys just left School or College,	—	—	—	—	14	14
Boys still in attendance at School or College,	—	24	42	67	—	133
No occupation stated,	205	—	—	25	—	230
Total Number of Young Men,	205	104	171	361	174	1,015
<i>Young Women.</i>						
Persons engaged in Farming Occupations,	—	150	196	66	125	546
Domestic Servants,	—	14	9	—	30	53
Printing Trades,	—	—	—	—	—	—
Dressmakers, Milliners, &c.,	—	8	2	7	—	17
Textile Industries—Designers, Weavers, &c.,	—	—	—	—	—	—
Factory Workers not included in above,	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery,	—	18	62	—	5	85
Spinning, Drawn Thread Work, &c.	—	—	—	—	—	—
Saleswomen, Shopkeepers, &c.,	—	—	—	27	—	27
Clerks, Cashiers, Civil Servants, &c.,	—	10	—	2	—	12
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	—	—	4	25	12	41
Occupations not included in above Classes,	—	—	1	38	—	39
Girls just left School or College,	—	9	—	—	15	24
Girls still in attendance at School or College,	—	24	50	147	12	233
No occupation stated,	683	—	—	101	—	784
Total Number of Young Women,	683	242	324	413	199	1,861
Total Number of Students,	888	346	495	774	373	2,876

TABLE V.—continued.

SUMMARY.

OCCUPATIONS OF STUDENTS.	URBAN SCHOOLS.				
	Leicester.	Manchester.	Ulster.	Connaught.	Totals.
Young Men.					
Persons engaged in Farming Occupations,	55	37	67	3	162
Building Trades, including Workers in Wood, &c.	171	218	305	39	733
Cowsh and Car Builders,	13	29	10	2	54
Engineers, Workers in Metal, Draughtsmen, &c.	255	190	895	6	1,346
Architects, Surveyors, Civil Engineers, &c.	45	32	61	—	138
Electrical Engineers, Scientific Instrument Makers, &c.	162	49	85	1	297
Printing Trades—Compositors, Lithographers, &c.	75	42	148	9	274
Textile Industries—Designers, Weavers, &c.	27	27	534	7	588
Painters, Decorators, &c.	44	27	83	16	160
Plumbers, Gasfitters, &c.	59	43	65	6	173
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	29	36	109	16	190
Chemists, Analysts, Druggists, &c.	67	42	135	1	245
Salesmen, Shopkeepers, Warehousemen, &c.	179	138	477	46	840
Clerks in Commercial Offices,	469	344	1,014	66	1,893
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices,	254	113	332	—	699
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	57	80	225	36	398
Occupations not included in above Classes,	69	6	59	23	157
Boys just left School or College,	613	101	328	13	1,055
Boys still in attendance at School or College,	59	74	34	11	178
No occupation stated,	121	112	119	28	380
	277	63	259	7	606
Totals (Young Men),	3,045	1,878	5,344	319	10,586
Young Women.					
Persons engaged in Farming Occupations,	2	16	72	—	90
Domestic Servants,	212	146	304	39	699
Printing Trades,	5	—	12	—	17
Dressmakers, Milliners, &c.	121	67	516	24	728
Textile Industries—Designers, Weavers, &c.	52	—	436	—	488
Factory Workers not included in above,	56	5	467	5	529
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	18	231	34	2	385
Saleswomen, Shopkeepers, &c.	176	152	270	15	613
Clerks, Cashiers, Civil Servants, &c.	322	120	630	24	1,096
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	224	178	715	77	1,194
Occupations not included in above Classes,	29	9	69	5	112
Girls just left School or College,	159	120	180	101	460
Girls still in attendance at School or College,	133	234	168	—	535
No occupation stated,	268	137	366	20	791
	1,531	594	1,579	99	3,803
Totals (Young Women),	2,780	2,064	5,830	402	11,076
Totals (Young Men and Young Women),	5,825	3,942	11,274	721	21,762

TABLE V.—continued.

SUMMARY.

COUNTY SCHOOLS. Permanent centres of Instruction.					COUNTY SCHOOLS. Itinerant Instruction.					OCCUPATIONS OF STUDENTS.
Lecturer.	Minster.	Uthor.	Connaught.	Totals.	Lecturer.	Minster.	Uthor.	Connaught.	Totals.	
Young Men.										
37	146	130	43	356	624	276	781	443	2,126	Persons engaged in Farming Occupations, .
123	172	48	15	356	83	39	53	26	201	Building Trades, including Workers in Wood, &c.
16	11	2	2	31	4	4	2	—	19	Coach and Car Builders.
52	49	23	—	124	14	3	9	—	26	Engineers, Workers in Metal, Draughts- men, &c.
5	4	3	—	12	1	—	1	—	2	Architects, Surveyors, Civil Engineers, &c.,
5	—	1	—	6	—	1	—	—	1	Electrical Engineers, Scientific Instrument Makers, &c.
12	3	5	—	20	—	—	2	—	2	Printing Trades—Compositors, Lithographers, &c.
2	—	23	—	25	—	8	19	—	27	Textile Industries—Designers, Weavers, &c.
23	15	5	—	43	—	—	8	—	8	Painters, Decorators, &c.
11	10	9	1	31	3	—	2	—	5	Plumbers, Gasfitters, &c.
11	9	6	—	26	7	3	2	—	12	Trades involving Applied Art—Jewellers, Furniture Makers, &c.
3	8	2	—	13	—	—	2	—	2	Chemists, Analysts, Druggists, &c.
194	115	189	38	537	39	29	56	80	204	Salesmen, Shopkeepers, Warehousemen, &c.
123	52	43	9	237	37	3	10	13	63	Clerks in Commercial Offices.
56	28	41	—	125	3	3	5	1	12	Clerks in Banks, Civil Service, Law, As- surances, and Accountants' Offices.
55	72	41	6	174	62	25	40	23	150	Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical)
2	16	7	2	27	—	2	—	—	2	Occupations not included in above Classes.
53	130	35	33	251	93	73	45	32	243	Boys just left School or College.
21	43	24	—	93	14	47	124	14	199	Boys still in attendance at School or College.
144	598	62	51	765	347	350	333	133	1,133	No occupation stated.
73	64	23	—	165	29	11	23	230	294	
931	1,430	721	209	3,282	1,491	883	1,340	1,017	4,840	Totals (Young Men).
Young Women.										
28	63	368	56	493	1,003	1,656	736	546	3,948	Persons engaged in Farming Occupations,
136	19	75	14	244	824	202	310	53	1,389	Domestic Servants.
1	3	—	—	3	—	—	35	—	37	Printing Trades.
36	11	41	4	92	61	44	47	17	169	Dressmakers, Milliners, &c.
31	22	32	—	85	—	—	92	—	92	Textile Industries—Designers, Weavers, &c.
55	24	132	—	211	31	2	128	—	161	Factory Workers not included in above.
42	178	315	171	1,916	23	85	8	85	291	Workers in Lace, Crochet, Embroidery, Splicing, Drawn-Thread Work, &c.
39	74	110	11	254	114	310	98	27	549	Sole-makers, Shoemakers, &c.
45	9	58	4	116	27	18	19	12	76	Clerks, Cashiers, Civil Servants, &c.
197	106	87	14	314	133	103	162	41	439	Teachers, Assistant Teachers, Pupil Teachers.
1	6	10	1	18	—	3	7	—	10	Students (University, Medical).
119	93	176	107	494	325	285	275	39	924	Occupations not included in above Classes.
19	67	50	—	136	39	89	67	24	229	Girls just left School or College.
323	186	177	19	705	297	354	268	233	1,352	Girls still in attendance at School, or College
183	179	208	65	615	121	299	367	734	1,562	No occupation stated.
1,360	1,449	3,310	466	4,985	1,504	3,651	2,819	1,861	10,635	Totals (Young Women).
1,691	2,479	3,031	466	8,267	3,905	4,533	4,159	3,878	15,475	Totals (Young Men and Young Women).

TABLE VI.
LOCAL EXAMINATIONS IN ART AND IN SCIENCE AND
TECHNOLOGY (IRELAND), 1912.

LIST OF EXAMINATION CENTRES, showing the subjects in which
examinations were held at each Centre.

(NOTE.—A.D.=Architectural Design; A.M.=Drawing the Antique from Memory; Anat.=Anatomy; Arch.=Architecture; C.O.=Drawing of Common Objects from Memory; D.=Design; D.A.=Drawing the Antique; F.=Freehand Drawing in Outline; G.D.=Geometrical Drawing (Art); H.O.=Historic Ornament; L.=Drawing in Light and Shade from a Cast; M.=Model Drawing; M.A.=Modelling from the Antique; M.D.=Modelling Design; M.H.=Modelling the Head from Life; M.L.=Modelling from Life; P.=Perspective; P.F.=Memory Drawing of Plant Form; Princ. O.=Principles of Ornament; Ptg. O.=Painting Ornament; S.L.=Painting from Still Life; Science Subjects are designated by the numbers given them in Circular 776 (1912) of the Board of Education.)

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
LEINSTER.			
6247	Co. CARLOW: Bagenalstown: Presentation Convent.	—	G.-D., and F.
6269	Carlow: Convent of Mercy.	—	L.
6356	Tullow: Brigidine Convent.	—	L.
6197	Tullow: St. Patrick's Seminary.	—	G.-D., F., L., M., and D.
6269	Co. DUBLIN: Blackrock: Dominican Convent, Ston Hill.	—	G.-D., L., M., and D.
6143	Co. DUBLIN OF DUBLIN: Dublin: Christian Brothers' Novitiate, Marisco.	—	G.-D., F., L., M., and D.
6010	Dublin: City of Dublin Technical Schools.	Subjects I., II., III., IV., V., VI., VII., VIII., IX., X., XII., XIII., and XIV.	G.-D., F., C.O., L., M., and D.
6019	Dublin: Metropolitan School of Art.	Subject VI.	G.-D., P., Princ. O., S.L., A.M., F., C.O., L., M., D.I., D.A., Anat., D., Pig. O., Arab., P.-F., M.A., M.H., M.D. (Stare 2), M.L., and M.D. (Hean)
6458	Co. KILKENNY: Goresbridge: Brigidine Convent.	—	L.
6607	Kilkenny: City Technical School.	—	G.-D., S.L., F., L., M., D., and F.-F.
6509	KING'S COUNTY: Birr: Technical School.	—	F.
6416	Co. LOUTH: Drogheda: Municipal Technical School.	—	F., L., and M.
6120	Drogheda: Sienna Convent.	—	F.
6415	Dundalk: Municipal Technical School.	Subject VI.	G.-D., F., L., M., and D.
6568	Co. MEATH: Navan: Loreto Abbey.	—	G.-D., L., and D.
6310	QUEEN'S COUNTY: Abbeyleix: Brigidine Convent.	—	G.-D., L., M., and D.
6100	Monasterevin: Monastery School.	—	G.-D., F., and L.

EXAMINATION CENTRES—continued.

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
6567	CO. WESTMEATH: Athlone: Technical School,	—	O.-D., and L.
6620 6190	CO. WEXFORD: Kansborough: Technical School, New Ross: Municipal Technical School.	— —	F., C.O., and L. O.-D., and F.
6347	Wexford: Municipal Technical Institute.	—	G.-D., P., S.L., F., L., M., D., and P.-F.
6702	CO. WICKLOW: Wicklow: Technical School,	—	F., and M.
MUNSTER.			
4603	CO. COCK: Bandon: Technical School,	—	F., and M.
4145	Carrigrohilly: St. Joseph's Convent of Mercy.	—	F., and M.
5064	Dunmanway: Convent of Charity, St. Mary's.	—	F.
6751	Fermoy: Technical School,	—	O.-D., F., L., M., D., Arch., and A.D.
5595	Mallow: Patrician Brothers' Academy.	—	L., and D.
4554	Mallow: Technical School,	—	F.
4766	Midleton: Technical School,	—	F.
5601	Queenstown: Technical School,	Subjects I., III., VI., VII., VIII., IX., and XI.	F., and M.
4759	Ringaskiddy: Technical School,	Subjects VI. and VII.	—
4602	Skibbereen: Technical School,	—	F., and M.
4610	Youghal: Technical School,	—	L., and M.
4013	CO. BOROUGH OF COCK: Cork: Christian Brothers' Schools, Our Lady's Mount.	—	G.-D., F., L., M., and D.
4002	Cork: Crawford Municipal Techni- cal Institute.	Subjects III., VII., X., and XIV.	O.-D., P., S.L., A.S.L., F., C.O., L., M., D.L., D.A., Anat., D., Ptg., O., P.-F., M.A., and M.L.
6680	CO. KERRY: Killarney: Technical School,	—	F., and C.O.
6371	Trillick: Central Technical School,	—	O.-D., F., and M.
4160	CO. BOROUGH OF LIMERICK: Limerick: Christian Brothers' Schools, Sexton Street.	—	G.-D., F., L., M., and D.
4039	Limerick: Municipal Technical Institute.	Subjects II., X., XII., XIII., and XIV.	O.-D., P., S.L., F., C.O., L., M., D.A., D., Ptg., O., and P.-F.
6852	CO. TIPPERARY: Carrick-on-Suir: Technical School,	—	G.-D., and F.
6147	Cashel: Presentation Convent,	Subject II.	O.-D., P., S.L., F., L., D., and P.-F.
6148	Charles: Presentation Convent,	—	F. and M.
6809	CO. WATERFORD: Dungarvan: Technical School,	—	F., and M.
6808	Lismore: Technical School,	—	F.
6810	Tramore: Technical School,	Subject X.	—
4477	CO. BOROUGH OF WATERFORD: Waterford: Central Technical In- stitute.	Subjects III., X., and XIV.	G.-D., P., S.L., F., L., M., D., Anat., and P.-F.
6115	Waterford: Christian Brothers' Schools, Mount Sten.	—	O.-D., F., L., M., and D.
7023	Waterford: Ursuline Convent,	—	O.-D.

EXAMINATION CENTRES—*continued.*

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
ULSTER.			
6358	CO. ANTRIM: Ballymena: Municipal Technical School.	Subjects I. and X.	G.-D., S.L., F., L., M., D., and P.-F.
6880	Ballymoney: Technical School.	Subjects I. and X.	G.-D., F., M., and D.
6845	Curickfergus: Technical School.	—	F., and M.
6232	Larne: Technical School.	Subjects I., VI., and X.	G.-D., F., and M.
6080	CO. BOROUGH OF BELFAST: Belfast: Christian Brothers' Schools, St. Mary's.	—	M., and D.
6164	Belfast: St. Dominic's High School.	—	G.-D., F., L., M., and D.
6227	Belfast: Municipal Technical Institute.	Subjects I., II., III., IV., V., VI., VII., VIII., IX., X., XI., XIII. and XIV.	G.-D., P., Princ. G., S.L., A.M., F., C.O., L., M., D.L., D.I., Anat., D., H.O., Fie. O., Arch., P.-F., M.D., A.D., M.D. (Stage V) and M.L.
6071	Belfast: Victoria College.	—	F.
6397	CO. ARMAGH: Armagh: Municipal Technical School.	—	L., D., P.-F., and Arch.
6038	Armagh: Natural History and Philosophical Society's Art Rooms.	—	F., and M.
6367	Lurgan: Municipal Technical School.	—	F., M., and D.
6574	Portadown: Municipal Technical School.	Subjects III., VI., and VII.	F., and M.
6387	CO. DOWN: Bangor: Technical School.	—	G.-D., M., and D.
6344	Newry: Municipal Technical School.	—	G.-D., S.L., F., L., M., and D.
6645	Newtownards: Municipal Technical School.	Subject X.	—
6372	CO. FERMANAGH: Enniskillen: Technical School.	Subject X.	F.
6235	CO. LONDONDERRY: Coleraine: Technical School.	Subjects I., III., VI., X., XIII., and XIV.	G.-D., S.L., F., L., M., and D.
6976	Lamavady: Technical School.	—	G.-D., L., and M.
6037	CO. BOROUGH OF LONDONDERRY: Londonderry: Municipal Technical School.	Subjects I., VI., and X.	G.-D., P., F., C.O., L., M., D.A., D., and P.
6701	CO. TYRONE: Cookstown: Technical School.	—	G.-D., F., and M.
6581	Dungannon: Technical School.	—	G.-D., and M.
6707	Omagh: Technical School.	—	F., L., and M.
CONNAUGHT.			
6596	CO. GALWAY: Ballinasloe: Technical School.	—	L., M., D., P.-F., and M.A.
6066	Galway: City of Galway Technical Institute.	Subjects II., IV., V., and X.	S.L., F., and M.
6765	CO. SLEIGO: Sligo: Municipal Technical School.	Subjects III. and X.	F., L., M., Anat., D., and M.D. (Stage V)

TABLE VII.

LOCAL EXAMINATIONS IN ART AND IN SCIENCE
AND TECHNOLOGY (IRELAND), 1912.

Summaries of Results.

EXAMINATIONS IN ART (IRELAND.)

SUBJECT.	Number Ex- amined	First Class.	Second Class.
Freehand Drawing in Outline, . . .	638	78	275
Drawing in Light and Shade from a Cast, .	304	20	66
Model Drawing,	518	80	179
Geometrical Drawing,	266	27	102
Perspective,	71	27	29
Drawing of Common Objects from Memory,	20	8	4
Memory Drawing of Plant Form, . . .	123	17	39
Drawing from the Antique,	50	19	22
Drawing the Antique from Memory, . .	12	5	—
Drawing from Life,	48	1	3
Anatomy,	28	5	20
Painting Ornament	39	9	13
Painting from Still Life,	90	13	32
Principles of Ornament,	41	3	16
Historic Ornament,	11	2	4
Architecture,	9	1	4
Architectural Design,	4	—	—
Design, Stage I,	212	5	92
Design, Stage II,	89	1	10
Design, Honours,	8	—	4
Modelling the Head from Life, . . .	3	—	2
Modelling from Life,	12	1	4
Modelling from the Antique,	23	4	3
Modelling Design, Stage II,	14	3	5
Modelling Design, Honours,	1	—	—
Totals,	2,634	329	928

EXAMINATIONS IN SCIENCE AND TECHNOLOGY (IRELAND).

SUBJECT.	Lower Stage		Higher Stage		
	Number Examined.	Pass.	Number Examined.	Pass (with distinction)	Pass.
<i>Group A.—Pure and Applied Mathematics.</i>					
I. Practical Geometry and Graphics.	18	14	12	2	4
II. Pure Mathematics .	34	22	8	2	3
III. Practical Mathematics .	32	22	19	2	5
IV. Theoretical Mechanics (Solids).	18	6	—	—	—
V. Theoretical Mechanics (Fluids).	14	7	—	—	—
<i>Group B.—Engineering.</i>					
VI. Machine Construction and Drawing.	33	14	4	—	1
VII. Applied Mechanics (Materials and Structures)	24	9	4	—	—
VIII. Applied Mechanics (Machines and Hydraulics)	17	11	—	—	—
IX. Heat Engines .	13	9	2	1	1
X. Building Construction .	38	28	19	2	5
XI. Naval Architecture .	9	7	1	—	—
<i>Group C.—Physics.</i>					
XII. Heat .	6	6	—	—	—
XIII. Magnetism and Electricity	12	8	—	—	—
<i>Group D.—Chemistry.</i>					
XIV. Inorganic Chemistry .	27	12	1	—	—
XV. Organic Chemistry .	—	—	—	—	—
<i>Group E.—Mining and Metallurgy.</i>					
XVI. Coal Mining .	—	—	—	—	—
XVII. Metallurgy .	—	—	—	—	—
TOTALS .	295	175	70	9	19

King's Prizes (Art) Awarded to Irish Students.

CORK : CRAWFORD MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Subject for which Prize was awarded.
Power, John, . . .	Drawing in Light and Shade from a Cast.

DUBLIN : METROPOLITAN SCHOOL OF ART.

Name of Candidate.	Subject for which Prize was awarded.
Corr, James Ernest, .	Design—Stage II.
Bowe, Francis Dominic,	Modelling from the Antique.

Royal Scholarship (Science) Awarded to an Irish Student.

BELFAST : MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Group.	Place in Order of Merit in Competition.
Taylor, George .	Mechanics. . . .	4

TABLE VIII.
NATIONAL COMPETITION, 1912.

Medals, Prizes and Awards gained by Irish Students,

BELFAST : MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
Ball, Elizabeth A. . .	Design for stained glass window, . . .	Commended.
Duncan, Frances H. . .	Design for damask serviette, . . .	Commended.
Forde, Leonora T. . .	Designs based on a flower for plait, . . .	Commended.
Garrett, Lucy, . . .	Studies of historic styles of ornament, . . .	Commended.
Geddes, Wilhelmina M. . .	Design for book-illustration, . . .	National Book Prize.
Gilmere, Elizabeth R.F. . .	Modelled feet from life, . . .	National Book Prize.
Kane, George M. . .	Time sketches of figures from the nude, . . .	Bronze Medal.
M'Kelvey, Frank, . . .	Shaded drawing of a figure from the nude, . . .	Commended.
M'Kelvey, Frank, . . .	Shaded drawing of a figure from the nude, . . .	Commended.
Megaw, Jeanette I. . .	Design for a hearth-rug, . . .	Commended.
Scott, Dorothy B. . .	Studies of birds treated for design, . . .	Commended.
Wright, Alice M. M. . .	Designs for enamelled panels, . . .	Commended.
Wright, Alice M. M. . .	Studies of historic styles of ornament, . . .	Commended.

CORK : CRAWFORD MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
Anglin, Bessie, . . .	Design for lace parasol cover and crochet Collarette, . . .	Commended.
Higgins, Joseph, . . .	Modelled figure from the nude, . . .	Bronze Medal.
O'Cooley, Gertrude S. . .	Shaded drawing of a head from the cast, . . .	National Book Prize.
O'Neill, Mary, . . .	Design for needlepoint lace scarf, . . .	Silver Medal.
O'Neill, Mary, . . .	Designs for crochet collarette and dress trimmings, . . .	Bronze Medal.

DUBLIN : METROPOLITAN SCHOOL OF ART.

Name.	Description of Work.	Award.
Ball, Ethel G.	Modelled figure from the nude.	National Book Prize.
Borr, Francis D.	Modelled figure from the nude.	Commended.
Clarke, Harry.	Designs for stained glass.	Gold Medal.
Crillie, Margaret.	Group in oil colours.	Bronze Medal.
Dawson, Bertha, R.D.	Design for a lace bertha.	Commended.
Duffy, Mary E.	Studies of plant-form.	Commended.
Duncan, Una E.	Modelled figure from the nude.	National Book Prize.
Duncan, Una E.	Modelled head from life.	Commended.
Gariand, Alice C.	Studies of plant-form.	National Book Prize.
Gray, Hilda S.	Design for lace Handkerchief.	Bronze Medal.
Gray, Hilda S.	Designs for lace collars.	Commended.
Greene, Rebecca H.	Modelled figure from the nude.	Commended.
Hamilton, Letitia M.	Design for enamelled panel.	Silver Medal.
Holland, Annie.	Group in oil colours.	Commended.
Hunter, Grace C. H.	Design for Irish linen damask table-cloth.	Bronze Medal.
Hunter, Grace C. H.	Design for a lace scarf.	Commended.
Hunter, Olive M.	Design for lace bertha.	Silver Medal.
Kestling, John S.	Studies of plant-form.	Commended.
McDermott, Austin.	Design for stained glass.	National Book Prize.
O'Brien, James.	Modelled figure from the nude.	Silver Medal.
O'Byrne, Gerald.	Study of historic style of ornament, worked in glass.	Commended.
Quikley, Ethel M.	Studies of plant-form.	National Book Prize.
Rhoad, Ethel.	Time sketches of figures from the nude.	Commended.
Saville, William J.	Studies of plant-form.	Commended.
Seale, Phyllis.	Design for enamelled plaque.	Commended.
Slaton, James S.	Group in oil colours.	Bronze Medal.
Teehy, Patrick M.	Oil-painting of a figure from the nude.	Commended.
Wiles, Francis.	Modelled figure from the nude.	Bronze Medal.
Wills, Evelyn M.	Studies of plant-form.	Silver Medal.
Wills, Evelyn M.	Group in oil colours.	National Book Prize.

KILKENNY : CITY TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
Squire, Alice M.	Shaded studies of flowers from nature.	Commended.

LIMERICK : MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
McGuinness, Joseph.	Carved wood ornament from a cast.	National Book Prize.

LONDONDERRY : MUNICIPAL TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
Cromie, Edith E. J.	Designs based on a flowering plant.	Commended.
Cromie, Edith E. J.	Studies of plant-form.	Commended.
Moss, Mary M.	Studies of plant-form.	National Book Prize.

SLIGO : MUNICIPAL TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
Jubb, Norris.	Studies in lettering.	Commended.

TABLE IX.
EXAMINATIONS IN SUBJECTS OF TECHNOLOGY
(IRELAND), 1912.

Summaries of Results.

YEAR.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes
1912,	915	498	10
1911,	934	499	10
1910,	837	508	15
1909,	997	513	10
1908,	822	446	10

No. of School	Centre of Examination.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes.
6397	Armagh: Municipal Technical School	—	—	—
6596	Ballinasloe: Technical School	1	1	—
6358	Ballymena: Municipal Technical School	2	1	—
6550	Ballymoney: Technical School	7	2	—
6227	Belfast: Municipal Technical Institute	347	223	9
6245	Blackrock: Municipal Technical School	—	—	—
—	Carraig-on-Saigh: Post Office	2	—	—
6556	Clonmel: Central Technical School	9	7	—
6235	Coleraine: Technical School	—	—	—
6191	Cookstown: Technical School	2	—	—
6083	Cork: Crawford Municipal Technical Institute	126	66	—
6671	Doneraile: Technical School	3	1	—
6416	Drogheda: Municipal Technical School	2	2	—
6910	Dublin: City of Dublin Technical Schools	247	102	—
—	Dublin: Royal Irish School of Art Needlework	2	—	—
6531	Dungannon: Technical School	4	3	—
6899	Dungarvan: Technical School	4	1	—
6572	Enniskillen: Technical School	6	4	—
6751	Fermoy: Technical School	8	3	1
6966	Galway: City of Galway Technical Institute	8	2	—
6697	Kilkeney: City Technical School	9	5	—
6163	Kinstown: Municipal Technical School	7	7	—
6232	Larne: Technical School	—	—	—
6039	Limerick: Municipal Technical Institute	22	7	—
6037	Londonderry: Municipal Technical School	16	12	—
6433	Lurgan: Convent of Our Lady of Mercy	—	—	—
6367	Lurgan: Municipal Technical School	16	10	—
6442	Nans: Technical School	—	—	—
6344	Newry: Municipal Technical School	3	1	—
6645	Newtownards: Municipal Technical School	—	—	—
6797	Omagh: Technical School	1	—	—
6694	Queenstown: Technical School	22	9	—
6941	Ringsend: Pembroke Technical School	3	3	—
6765	Sligo: Municipal Technical School	3	1	—
6798	Strahane: Technical School	3	3	—
6571	Trillick: Central Technical School	8	4	—
6477	Waterford: Central Technical Institute	21	13	—
Total		915	498	10

EXAMINATIONS IN SUBJECTS OF TECHNOLOGY (IRELAND), 1912—
continued.

Prizes and Medals gained by Irish Students.

BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Buchanan, Joseph.	Typography (Compositor's Work).	II.	Third.	Bronze Medal.
Carabine, William John.	Flax Spinning.	I.	Third, (equal)	Bronze Medal.
Kelso, William Alexander.	Flax Spinning.	Final.	First.	£3 (Clothworkers) and Silver Medal.
Patterson, John.	Flax Spinning.	I.	First.	£2 (Clothworkers) and Bronze Medal.
Stevenson, John.	Flax Spinning.	I.	Third, (equal)	Bronze Medal.
Thompson, William.	Brickwork.	Final.	Second.	£2 10s. (Tylers & Bricklayers) & Silver Medal.
Vick, Ernest Henry.	Telephony.	I.	First.	£2 (Pewterers) and Bronze Medal.
Wilson, John.	Flax Spinning.	I.	Second.	£1 10s. (Clothworkers) and Bronze Medal.
Wood, William Henry.	Telephony.	I.	Second.	£1 (Pewterers) and Bronze Medal.

FERMOY: TECHNICAL SCHOOL.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Coughlan, Patrick.	Plasterer's Work.	I.	Third.	£1 (Plasterers) and Bronze Medal.

LIST of IRISH CANDIDATES awarded SCHOLARSHIPS and EXHIBITIONS offered by the WORSHIPFUL COMPANY of DRAPERS on the results of the Examinations of the City and Guilds of London Institute in the several branches of TEXTILE MANUFACTURE.

Two Scholarships of the Annual Value of £60, in addition to College Fees, tenable for two years.

Courtney, Robert J. (Linen Weaving)—Belfast: Municipal Technical Institute.

McEvoy, Francis (Linen Weaving)—Lurgan: Municipal Technical School.

Four Exhibitions of the Annual Value of £10, tenable for two years.

Carabine, William J. (Flax Spinning)—Belfast : Municipal Technical Institute.

Higgins, John M. (Linen Weaving)—Belfast : Municipal Technical Institute.

Rutherford, Herbert G. (Linen Weaving)—Lurgan : Municipal Technical School.

Wilson, John (Flax Spinning)—Belfast : Municipal Technical Institute.

EXTRACT from the ANNUAL REPORT of the *City and Guilds of London Institute* for the SESSION 1911-12.

"As compared with last year's results, the number of registered classes in Technology has increased from 240 to 241, and the number of Students in attendance from 2,740 to 3,207, but the number of Candidates and of passes, viz., 915 and 498, shew very little change as compared with last year when 934 Candidates were presented of whom 499 passed. Of the prizes and medals offered by the Institute 10 have been awarded to students in Ireland. At the examinations in Manual Training, two Candidates qualified for Teacher's Certificates in Woodwork, and four passed the First Year's examination. Of the Scholarships and Exhibitions in Textiles, offered by the Drapers' Company, two Scholarships and four Exhibitions were awarded to Irish students."

ROYAL COLLEGE OF SCIENCE FOR IRELAND.

FORTY-FOURTH ANNUAL REPORT OF THE COUNCIL FOR THE SESSION 1911-12.

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit the Forty-fourth Annual Report of the Royal College of Science for Ireland.

Since this is the first Report on a session completed in the new buildings, I wish to express, on behalf of the Council, our appreciation of the very greatly improved conditions under which the work of the College in general can now be carried on.

Temporary accommodation, pending the provision of suitable buildings elsewhere, has been provided for the work of the Department's officers in charge of the "Weeds and Seeds Act" (Seed Testing Station), the "Fertilizers and Feeding Stuffs Act" (Chief Agricultural Analyst), and Veterinary Hygiene. The use of the College Library and other facilities have been placed at the disposal of the officers concerned.

Gilbert T. Morgan, D.Sc., F.I.C., Assistant Professor in Chemistry, Imperial College of Science and Technology, London, was appointed during the Session to the Chair of Applied Chemistry vacated by Sir Walter Hartley, D.Sc., F.R.S., who, after thirty-one years' service, retired on 31st August, 1912, under the Civil Service Regulations as to limit of age.

During the session 1911-12 there were three Royal Scholars, fifteen Science Scholars, thirty-four Agricultural Scholars (including one in Horticulture, one in Forestry, and one in Creamery Management), fifteen Teachers in Training, four Local Exhibitioners, one Special Research Student, and one Post-Graduate Student, to whom a Research Studentship had been awarded. There were also thirty fee-paying Associate Students and thirty-eight fee-paying Non-Associate Students.

The total number of students in the College during the session was one hundred and forty-one.

In addition, three hundred and twenty-five students attended the special courses of instruction organised in the College by the Department during the summer of 1912.

Sessional examinations, conducted conjointly by the Professors and Lecturers of the College and external Examiners appointed by the Department, were held in forty-two subjects.

The annual recommendation as to the award of diplomas, Royal Scholarships, and prizes was made to the Department by the Council on the 26th June, 1912.

The Diplomas of Associateship were awarded as follows on the results of the sessional examinations :—

Faculty of Engineering.—R. J. England, R. J. Lannon, J. Lowry, R. W. Meredith, M. E. Nolan, J. J. A. Gilmour, N. E. W. Sloan.

Faculty of Applied Chemistry.—R. Fleming, A. E. F. Hutchinson, A. F. O'Dowd.

Faculty of Agriculture.—M. Caffrey, D. J. Curran, J. Dick, J. M. J. Duke, J. J. Hassett, T. R. Hewitt, H. A. Lafferty, W. McLean, D. O'Connell, T. O'Connell, E. Turner (Horticulture).

Teachers-in-Training.—Natural Science Section—Miss L. Bermingham, Miss B. B. S. Dawson, Miss A. Hemphill, P. O'Connor, R. N. Sheridan, R. L. Valentine.

„ „ Physics Section—O. McKenna.

„ „ Chemistry Section—W. M. O'Riordan.

Miss Genevieve V. Morrow, A.R.C.Sc.I., was awarded by the Royal Commissioners of the 1851 Exhibition a Science Research Scholarship of the value of £150 per annum, renewable for a second year, and has elected to pursue her studies in spectroscopy in the University of Vienna.

Richard W. Meredith, who obtained his Associateship in Engineering at the end of this session, was awarded an Industrial Bursary by the same Commissioners. The value of the Bursary is £100 per annum, and is renewable for a second year. Mr. Meredith has been enabled to enter, for the purpose of the Bursary, the Inchicore Works of the Great Southern and Western Railway of Ireland, through arrangements kindly made by Mr. Maunsell, Chief Locomotive Superintendent.

O. H. Little, M.A., A.R.C.Sc.I., Assistant in the Geological Laboratory, was awarded the Daniel Pidgeon Fund for research by the Council of the Geological Society of London, and proceeded to the investigation of the nature and origin of the green marbles of Connemara.

I have the honour to be, Sir,

Your obedient servant

T. JOHNSON.

CHEMISTRY.

Professor :—GILBERT T. MORGAN, D.S.C., F.I.C.

The number of students attending the courses of Chemistry was 42 of the first year, 16 of the second year, and 5 of the third year. Four students attended a special course in Assay.

To the students of the first year sixty lectures were delivered by Dr. J. H. Pollok (pending the appointment of the Professor) on general Chemistry, with an introduction to the principles of Metallurgy and Thermo-Chemistry.

In the chemical laboratories there were 42 students of the first year in charge of Dr. Pollok and Mr. Moss.

The total number of students attending the various courses in Chemistry was 73.

The Professor was nominated by the Department as a delegate to the Eighth International Congress of Applied Chemistry held in New York and Washington in September, 1912. He read before the section of Bio-Chemistry and Pharmacology a paper on "The influence of the chemical constitution of certain organic Hydroxyl and Aminic Derivatives on their germicidal power," and participated in a tour of laboratory and factory inspection.

RESEARCH WORK.

During the session 1911-12 Research Work was carried on by Dr. Pollok and Miss G. V. Morrow and by Mr. H. W. Moss in collaboration with Sir Walter Hartley, F.R.S.

During the summer term the following researches were initiated under the direction and supervision of the Professor :—

- (1) Miss F. M. G. Micklethwait, A.R.C.S.C. (Lond.), F.I.C., studied the chemical constitution of cyclic diazo compounds.
- (2) Mr. H. Webster Moss, A.R.C.S.C.I., A.I.C., investigated a new series of organic vanadium compounds.
- (3) Mr. J. Reilly, B.A., A.R.C.S.C.I., was engaged on a comparative study of non-aromatic diazo-derivatives.
- (4) Technological investigations on sulphide and other colouring matters were carried out in conjunction with the Greenmount Oil Works, Harold's Cross, and with Messrs. Read Holliday & Sons, Huddersfield.

The following papers have been published :—

"On the vacuum tube spectra of the vapours of some metals and metallic chlorides."

Part I.—Cadmium, Zinc, Thallium, Mercury, Tin, Bismuth, Copper, Arsenic, Antimony, and Aluminium.

Part II.—Lead, Iron, Manganese, Nickel, Cobalt, Chromium, Barium, Calcium, Strontium, Magnesium, Potassium, Sodium and Lithium." By James H. Pollok, D.Sc., *Sci. Proc. Royal Dublin Society*, 1912, **13**, 201 and 252.

"On the ultimate lines, and the quantities of the elements producing these lines, in spectra of the oxyhydrogen flame and spark." By Sir Walter Noel Hartley, F.R.S., and Henry Webster Moss, A.R.C.S.C.I., A.I.C. *Proc. Royal Society*, 1912, **A. 87**, 38.

"The ultimate lines of the vacuum-tube spectra of manganese, lead, copper, and lithium." By Genevieve V. Morrow, A.R.C.S.C.I. *Proc. Royal Dublin Society*, 1912, **13**, 269.

"Co-ordination Compounds of Vanadium." By Gilbert T. Morgan and Henry Webster Moss. *Proc. Chem. Society*, 1912, **28**, 199.

ORGANIC CHEMISTRY.

LECTURER :—A. O'FARRELLY, M.A.

Forty lectures on organic chemistry were delivered, which were attended by sixteen students of the second year, viz : one in the faculty of Applied Chemistry, four teachers-in-training, and eleven in the faculty of Agriculture.

In the advanced laboratories, twenty-six students received instruction from the lecturer. Of these fifteen were students of the second year, viz.—ten agricultural students, working according to the four year syllabus, one chemical student, and four teachers-in-training. Five were students of the third year. There were also three post-graduate students and two non-associate students doing separate special courses, and one fourth year Scholar engaged in research work.

ELECTRO-TECHNOLOGY AND PHYSICS. ELECTRO-TECHNOLOGY.

PROFESSOR :—W. BROWN, B.Sc., M.I.E.E., M.R.I.A.

There were seventeen students in the second year, viz :—twelve in the Faculty of Engineering, one in the Faculty of Applied Chemistry, and four Teachers-in-Training.

Fifty-five lectures were delivered by the Professor, the whole of which were attended by the Engineering students, thirty-four by the Teachers-in-Training, and nineteen by the students of Chemistry. There were six tutorial classes given by Mr. Allen.

The laboratory work consisted of sixty-two lessons given by the Professor and Mr. Allen, the whole of which were attended by the Engineering students, forty-one by the teachers-in-training and twenty-two by the chemical students.

The course in the Third Year consisted of fifty lectures delivered by the Professor attended by nine students; and seventy-nine Laboratory lessons, including dynamo-design and drawing, under the Professor and Mr. Allen.

During the session, the Third Year students in Engineering were taken to visit the Electric Lighting and Power Stations at Ringsend, Ballsbridge, Rathmines and Fleet Street, Dublin.

During the progress of the session there were installed in the Electro-Technological Laboratories eighteen dynamo electrical machines of output from four horse-power to forty-six horse-power, which are controlled by the accessories mounted on marble panelled switch-boards about forty feet in length. These machines (with all the necessary equipment) constitute the experimental plant for the use of the students in their third and fourth years' College Courses, and include various types of direct current dynamos and motors, alternating current machines, single phase and polyphase, rotary converters, split-pole converter, and a single phase alternating current repulsion motor.

PHYSICS.

LECTURER :—FELIX E. HACKETT, M.A., M.Sc., Ph.D.

The course of instruction in the first year consisted of fifty-six lectures and fifty-six laboratory lessons. It was attended by thirty-nine students, of whom thirty-six were associate students, two were local exhibitors, and two were non-associate students.

The general course of instruction in the second year consisted of thirty-two lectures and thirty-two laboratory lessons. Students in the Faculty of Engineering were given a special course in the laboratory consisting of twenty-one lessons. The course of lectures was attended by seventeen students, of whom twelve were in the faculty of engineering, six were in the faculty of applied chemistry, and four were teachers-in-Training.

The course for the third year was taken by one teacher-in-training, who received sixty lectures and carried out a course of advanced work in the laboratory during the year.

The general work of the laboratory was in charge of Mr. W. J. Lyons, B.A., A.R.C.S.C. (Lond.), and Mr. W. D. Douglas, A.R.C.S.C.I., under the direction of the Lecturer.

MATHEMATICS.

PROFESSOR :—W. MCFADDEN ORR, M.A., F.R.S.

In the Department of Mathematics the following Lectures were delivered :—

	Number of Lectures.
By PROFESSOR ORR :—	
Mathematics—First Year—Upper Division,	86
Second Year,	75
Mechanics—Second Year,	67
Applied Mechanics—Third Year	54
Thermodynamics—Third Year,	38
Mathematical Physics—Third Year,	19

By DR. JOHNSTON :—	
Mathematics—First Year—Lower Division	81
Mechanics—Second Year Agriculture and First Year in other Faculties	59
Mechanism—Third Year,	19
Mathematical Physics—Third Year,	47

In addition to the above, Dr. Johnston took charge of the work in Experimental Mechanics (First Year) referred to in the report of the Engineering Division.

AGRICULTURE.

PROFESSOR :—JAMES WILSON, M.A., B.S.C.

During the session there were twelve students in Agriculture and one in Horticulture attending the class in Agriculture. At end of the session ten of these received the diploma of the College in Agriculture and one in Horticulture.

Paul A. Murphy was awarded a Development Commission Scholarship in plant pathology.

A vacant Royal Scholarship was awarded by the Department to Michael Caffrey, who finished his college course in the Faculty of Agriculture in 1912, and is now prosecuting a research on the fertility of bog soils in the laboratory for agricultural biology.

AGRICULTURAL BIOLOGY.

LECTURER :—DAVID HOUSTON, F.L.S.

During the past session two courses of lecture and laboratory instruction were given to the third year agricultural students, by the Lecturer and Dr. McGinnis, namely :—

1. A course of 40 lectures on Agricultural Bacteriology with 225 hours laboratory work during the first term. Thirteen associate students and one non-associate student attended this course.

2. A course of 40 lectures on Agricultural Botany, with 225 hours laboratory and field instruction during the third term. Thirteen associate students attended the course.

W. J. Hartley, B.A., (Cantab), the external student in Bacteriology above referred to, was granted the use of the Advanced Laboratory for the remainder of the session to carry on original work in connection with creamery waters used in butter washing.

AGRICULTURAL CHEMISTRY.

LECTURER:—GEORGE STEPHENSON.

This year's class contained 18 third year students, 12 of whom were candidates for the associateship in Agriculture and one for that in Horticulture. Though all worked consistently, especially in the laboratory, and succeeded in passing the sessional examination, it is hoped that in future an increase in the time devoted to this subject will allow of a higher standard being demanded and attained. Thirty lectures and fifty practical classes are quite inadequate if the syllabus is to be fairly covered.

During the whole session Mr. Brownlee has been conducting an investigation into the relation between the composition of cheese and that of the milk from which it is made. This research is still proceeding.

GEOLOGY AND MINERALOGY.

PROFESSOR:—GRENVILLE A. J. COLE, M.R.I.A., F.G.S.

The following courses were carried out:—

I. *Mineralogy*.—Thirty-two lectures by the Professor, with twenty-two day's practical work, attended by five students of the Faculty of Chemistry and two non-associate students.

II. *Geology*.—Thirty-eight lectures by the Professor, and thirty-seven days' practical work, including nine field-excursions, attended by ten students of the Faculty of Agriculture. The field-work included a visit of two days to Carlingford and Belfast.

III. *Geology* for teachers-in-training in their third year. The same course as in the Faculty of Agriculture, with additional lessons in practical geography, petrology, and palaeontology, attended by six students.

IV. *Geology* for teachers-in-training in their second year. A course of thirteen lectures and sixteen days' practical work, including six field-excursions, attended by four teachers-in-training and three occasional students. In this course special attention is paid to the geological features of the county of Dublin.

The work in *Soil-Physics* having been transferred to a newly organised course of *Agricultural Geology* in the third year of the Faculty of Agriculture, no course was held during the session 1911-12.

Among the additions to the Geological Collections may be mentioned a series of the Oxford Wall Maps for Geographical teaching; a large scalenohedral crystal of calcite and a nugget of native silver and copper from the United States; characteristic crystallised silicates from the volcanic region near Rome; and numerous illustrations of the geology of Ireland, and especially of the county of Wicklow.

The following books and papers were published:—

- G. A. J. Cole.—“The Changeful Earth.” Macmillan & Co.
 “ ” ” “Rocks and their Origins.” Cambridge University Press.
 “ ” ” “The Problem of the Liffey Valley.”
Proc. R. Irish Acad. 30, Section B., 8.

BOTANY.

PROFESSOR:—T. JOHNSON, D.S.C., F.L.S.

The usual courses in Botany were held. Ten agricultural scholars attended a course of thirty-three lectures and forty-eight laboratory lessons, including a weekly field-excursion. The lectures were also attended by four teachers-in-training in their second year, to whom twenty-seven laboratory lessons were given. Six teachers of Natural Science in their third year attended a course of fifty-one laboratory lessons, as well as the lectures given to the Agricultural Scholars. One student in Horticulture attended a course of practical lessons in Vegetable Pathology on thirty-one days in the first term, and two students took out a special course in the second term, attending on forty-seven days. It is a distinct pleasure to express appreciation, at the end of this session, the first in the new buildings, of the increased accommodation now enjoyed by the botanical Division.

The following papers were published:—

T. Johnson:—

Forbesia cancellata, gen et sp. nov. *Sci. Proc. R. Dublin Soc.*,
13 N.S.

Heterangium hibernicum sp. nov. *Sci. Proc. R. Dublin Soc.*,
13 N.S.

ZOOLOGY.

PROFESSOR:—GEORGE H. CARPENTER, B.S.C., M.R.I.A.

The New Laboratories.—The work of arranging the specimens and apparatus of the Zoological Division in the rooms allotted in the new College Building was carried out during the months of August and September, 1911, so that everything was in readiness

for the opening of the Session. The systematic teaching series of specimens has been displayed in cases around the walls of the Elementary Laboratory, while the specimens illustrating the osteology and anatomy of Mammalia, and the cases of Injurious Insects are placed in the Advanced Laboratory.

Teaching.—The introduction of the four-year scheme in the Faculty of Agriculture has made possible a welcome change in the time-table, by which the zoological teaching is now divided between two sessions, the course on general Zoology being given in the second, and that on Agricultural Zoology in the third Year. In the Session 1911-12 only the general course was given; it occupied the first term, was attended by eleven students, and consisted of 50 lectures with 53 days' laboratory work. The work of the class was very satisfactory, and all the students (one after a supplemental paper) passed the examination.

This general course was also attended by six third year students pursuing the curriculum of the Teachers' Natural Science Group. These students had eight special additional lectures from the Professor, and fourteen lectures in Hygiene from Dr. Clarke. All completed their course with great credit.

During the second and third terms, zoological field work was carried on by the above-mentioned classes on six days.

In the third term, the short course for the second year science Teachers, consisting of eighteen lectures, eighteen laboratory lessons, and four days' field work, was given to four students, all of whom passed their examinations. The modification of the Teachers' time-table for the four year scheme will lead to the abandonment of this course in future, as the teachers will be associated with the course in General Zoology.

Albert College.—During the second term, the Professor conducted classes on nine afternoons for six horticultural students from the Albert College, Glasnevin. He also attended the Albert College on fifteen days during the second and third terms to supervise the zoological teaching to the agricultural students there.

Delegations.—By permission of the Department, the Association of Economic Biologists, of which the Professor is President, held its annual meeting in the zoological and botanical lecture-room of the College, on March 28th and 29th. In August the Professor attended the second meeting of the International Entomological Congress at Oxford.

New Apparatus.—The provision made for the special equipment of the College in its new building has enabled the Zoological Division to acquire, for the first time, a sufficient number of simple and compound microscopes for all its students. Some much needed physiological apparatus has also been procured, besides a new electric lantern, with microscopic projection attachment for the lecture-room. A large Zeiss binocular dissecting microscope, and a new "London" model Leitz

compound microscope for the staff's research work have been obtained.

Research.—The following papers were published during the session :—

“The Mouth-parts of some Beetle Larvae, with especial reference to the Maxillulae and Hypopharynx.” By G. H. Carpenter and Mabel C. MacDowell, *Quart. Journ. Micr. Science*, 57.

“The Fossil Isopod (Oxyuropoda) of the Irish Devonian.” By G. H. Carpenter. *Verhandl. des VIII. Internat. zoolog. Kongresses zu Graz* (1910), 1912.

“Injurious Insects and other Animals observed in Ireland during the year 1911.” By G. H. Carpenter. *Econ. Proc. R. Dublin Soc.*, 2.

“Clare Island Survey—Orthoptera.” By G. H. Carpenter. *Proc. R. Irish Acad.* 31, Section B.

ENGINEERING.

PROFESSOR :—H. H. JEFFCOTT, B.A.L., M.I.MECH.E.

LECTURER :—J. TAYLOR, M.A.

In the Department of Engineering the following courses of instruction were given during the session :—

To the first year students a course in Practical Geometry and Mechanical Drawing of 29 lectures by Mr. Taylor, and 30 practical lessons. Attended by 40 students.

To the first year students and to the second year Agricultural students a course in Experimental Mechanics of 59 experimental lessons by Dr. J. P. Johnston. Attended by 42 students.

To the second year Engineering students a course of 68 lectures by Professor Jeffcott in Machine Construction and Steam Boiler and Engine Practice, and 104 lessons in the Drawing School, Laboratory and Workshops. Attended by 12 students.

To the second year Engineering students a course in Surveying and Levelling of 26 lectures by Mr. Taylor, 7 days' field-work, and 24 lessons in Mapping and Plotting. Attended by 12 students.

To the third year Engineering students a course in Structural Engineering and in the Design of Steam Engines, Turbines, Gas and Oil Engines and Hydraulic Machinery, consisting of 80 lectures by Mr. Taylor, and 127 lessons in the Engineering School. Attended by 9 students.

To the third year Agricultural students a course in Building Construction and Agricultural Engineering, of 21 lectures by Professor Jeffcott, and 10 lessons in the Engineering School and Workshops. Attended by 12 students.

In addition to the associate students, there were 19 non-associate students attending various courses in Engineering.

Visits were made during the session to various engineering Works, including the Great Southern and Western Railway Works at Inchicore; Midland Great Western Railway Works at Broadstone; and Pigeon House Power Station.

During the year a large portion of the time of the staff was devoted to work incidental to the equipment of the new Workshops and Laboratories.

REPORT OF THE REGISTRAR OF THE ROYAL COLLEGE OF SCIENCE FOR IRELAND FOR THE SESSION 1911-12.

The number of Students who attended the College during the Session 1911-12 was 141; of which 38 were Non-Associate Students and 101 Associates—including four Local Exhibitioners undergoing a three years' course. There were, in addition, one Special Research Scholar and one Post-Graduate to whom a Research Studentship had been awarded under the Scheme inaugurated by the Department in the Session 1909-10.

The corresponding numbers for the past five years were:—

Session.	Associates.	Non-Associates.
1906-7,	68 ..	38
1907-8,	73 ..	33
1908-9,	85 ..	32
1909-10,	92 ..	26
1910-11,	101 ..	38

The 101 Associate Students were divided as follows:—

First Year,	41
Second Year,	27
Third Year,	33

The following Third Year Students passed their final Sessional examinations and were awarded the Diploma of Associate of the College:—

Faculty of Engineering.—Richard J. England, Robert J. Lannon, James Lowry, Richard W. Meredith, Maurice E. Nolan, John J. A. Gilmour, Norman E. W. Sloan.

Faculty of Applied Chemistry.—Robert Fleming, Albert E. F. Hutchinson, Arthur O'Dowd.

Faculty of Agriculture.—Michael Caffrey, Daniel Curran, James Dick, John M. J. Duke, John J. Hassett, Thomas R. Hewitt, Henry A. Lafferty, Wilfrid M'Lean, Daniel O'Connell, Timothy O'Connell.

Faculty of Agriculture (Horticulture).—Edmund Turner.

Teachers-in-Training. *Chemistry Section.*—William M. O'Riordan.

Physics Section.—Owen M'Kenna.

Natural Science Section.—Louise Birmingham, Belinda Dawson, Anne Hemphill, Patrick O'Connor, Robert N. Sheridan, Robert L. Valentine.

The two Royal Scholarships offered for competition to Associate Students of the First Year who are not Science and Technological Scholars, Teachers-in-Training, Local or other Exhibitioners, were awarded to Michael C. Wall and Francis O'Carroll.

The Silver Medal offered for competition to all First Year Associate students was won by J. W. Porter.

The following is a complete list of the Scholarships, Medal, and Prizes awarded on the results of the Sessional Examinations :—

Silver Medal,	James W. Porter.
First Royal Scholarship,	Michael C. Wall.
Second Royal Scholarship,	Francis O'Carroll.

PRIZES.

FIRST YEAR.

<i>Mathematics</i> .—Upper Division.—	I. Hopper, 1st.
	J. W. Porter, 2nd.
<i>Mathematics</i> .—Lower Division.—	E. Sheehy, 1st.
	W. J. Patterson, 2nd.
<i>Mechanics</i> .—	C. Murphy, 1st.
	E. Sheehy, } 2nd divided.
	T. Blake, }
<i>Practical Geometry</i> .—	J. W. Porter } 1st and 2nd divided.
	B. P. Bowen, }
<i>Experimental Physics</i> .—	T. W. Hall, }
	J. W. Porter, } 1st and 2nd divided.
	B. P. Bowen, }
<i>Chemistry</i> .—	J. W. Porter, 1st.
	I. Hopper, 2nd.

SECOND YEAR.

<i>Mathematics</i> .—	J. F. Nagle, 1st.
	D. R. Harte, }
	M. Keady, } 2nd divided.
	J. J. Smith, }
<i>Mechanics</i> .—	T. A. Casey, 1st.
	J. J. Smith, 2nd.
<i>Machine Construction</i> .—	J. J. Smith, 1st.
	A. M'Loughlin, }
	L. R. Turner, } 2nd divided.
<i>Physics</i> .—	J. F. Nagle, 1st.
	M. Keady, 2nd.
<i>Electro-Technology</i> (<i>Chemists</i>).—	H. G. Livingston, 1st.
	(<i>Engineers</i>).—A. M'Loughlin, 1st.
	J. J. Smith, 2nd.
	(<i>Teacherships-in-Training</i>).—B. O'Neill, 1st.
<i>Organic Chemistry</i> .—	B. O'Neill, 1st.
<i>Mineral Analysis</i> .—	H. G. Livingston, } Prize divided.
	J. T. Grey, }
<i>Botany</i> (<i>Teachers</i>).—	Miss C. Crockett, 1st.
<i>Geology</i> (<i>Teachers</i>).—	B. O'Neill, 1st.
<i>Zoology</i> (<i>Teachers</i>).—	Miss C. Crockett, 2nd.
<i>Surveying</i> (<i>Engineers</i>).—	A. J. M'Loughlin, 1st.
	J. J. Smith, 2nd.

SECOND YEAR, AGRICULTURE.

- Zoology*.—E. J. Kennedy, 1st.
 T. Blake, } 2nd divided.
 T. Healy, }
- Geology*.—R. J. Fannin, }
 E. J. Kennedy } 1st and 2nd divided.
- Botany*.—R. J. Fannin, 1st.
 E. J. Kennedy, 2nd.
- Chemistry*.—R. Lynch, 1st.
 T. Healy, 2nd.

THIRD YEAR.

- Mathematical Physics*.—Owen McKenna, 1st.
- Experimental Physics*.—Owen McKenna, 1st.
- Applied Mechanics*.—R. J. Lannon, 1st.
 R. W. Meredith, 2nd.
- Thermodynamics*.—W. M. O'Riordan, 1st.
 R. Fleming, }
 J. Lowry } 2nd divided.
- Engineering*.—R. J. Lannon, 1st.
 M. E. Nolan, 2nd.
- Mechanism*.—R. J. Lannon, 1st.
 R. W. Meredith, 2nd.
- Electro-Technology*.—R. J. Lannon, 1st.
 R. J. England, }
 J. Lowry, } 2nd Prize divided.
- Analytical Chemistry*.—A. F. O'Dowd, 1st.
- Mineralogy*.—W. M. O'Riordan, 1st.
 R. Fleming, 2nd.
- Botany (Teachers)*.—R. N. Sheridan, }
 R. L. Valentine, } 1st and 2nd divided.
- Geology (Teachers)*.—R. N. Sheridan, }
 R. L. Valentine, } 1st and 2nd divided.
- Zoology (Teachers)*.—R. L. Valentine, 1st.
 P. O'Connor, }
 A. Hemphill, } 2nd divided.

THIRD YEAR, AGRICULTURE.

- Agriculture*.—M. Caffrey, 1st.
 T. R. Hewitt, 2nd.
- Agricultural Chemistry*.—T. R. Hewitt, }
 W. M'Lean } 1st and 2nd divided.
- Agricultural Bacteriology*.—M. Caffrey, 1st.
 H. A. Lafferty, 2nd.
- Agricultural Botany*.—M. Caffrey, 1st.
 H. A. Lafferty, 2nd.
- Agricultural Engineering*.—M. Caffrey, 1st.
 W. M'Lean, 2nd.
- Veterinary Science*.—M. Mullaly, 1st.
 W. M'Lean, 2nd.

Short Summer Courses of Lectures and Laboratory work for Science Teachers engaged in Secondary and Technical Schools carrying out the Department's Schemes of Technical Instruction throughout the country were held during the month of July in the following subjects :—

Physics, First Year, attended by 60 students.

Chemistry, Third Year, attended by 32 students.

Chemistry, Fourth Year, attended by 35 students.

Physics, Third Year, attended by 11 students.

Physics, Fourth Year, attended by 15 students.

Physical and Commercial Geography, attended by 39 students.

Office Routine and Business Methods, attended by 20 students.

At the end of the course there was a Theoretical and Practical examination in each subject.

During the month of August courses were conducted in :—

Manual Training (Woodwork) attended by 19 Students.

Manual Training (Metal Work) attended by 10 Students.

Practical Mathematics, attended by 21 students ; and

Handrailing, attended by 10 students.

There was also a course on Rural Economy and School Gardening during the month of August, attended by 29 students for the First Year, and 24 Students for the Second Year of the course. This last course is intended mainly for Teachers working under the Board of National Education and was conducted partly at the College and partly at the Albert Agricultural College, Glasnevin, and at the Kingstown Technical School Gardens.

It is a pleasure to record that the great majority of our Diploma students of last Session have obtained employment or are engaged in research work as follows :—

One was awarded a Science Research Scholarship of £150 a year, and another an Industrial Bursary of £100 a year, each renewable for a second year, by the Royal Commissioners for the 1881 Exhibition ; one was awarded a Research Scholarship tenable at the College, and three Research Studentships with maintenance allowance, one tenable at Cambridge University and two at the College ; two were awarded Research Studentships without maintenance allowance tenable at the College ; one obtained a Senior Moderatorship in Trinity College, Dublin ; one was appointed Assistant to the Professor of Engineering at the College ; one was appointed Science Master, Technical Schools, Ballymena ; another, Science Master, Technical Schools, Newry, and a third, Science Master, St. Mary's College Galway ; one was appointed as Engineer at the Ocean Iron Works, Manchester, another as Engineer at Navan, superintending gas-engine erection ; one was appointed Assistant Inspector under the Congested Districts Board for Ireland ; one was appointed Instructor in School Gardening to the Department of Agriculture ; one was appointed Science Teacher, Girls' High School, Tumbidge Wells ; another, Science Teacher, Girls' High School, Cork ; three of our Agricultural Students were selected for the posts of House Master at the Agricultural Stations of Ballyhaise, Athenry and Clonakilty ; while others were appointed as Instructors in Agriculture by some of the Irish County Committees of Agriculture.

The work of the Session was carried out in the new College premises Upper Merrion Street, to which the apparatus and equipment of the old College in Stephen's Green had been removed during the months of August and September, and both the staff and the students thoroughly appreciated the increased facilities afforded by the spacious and well-equipped lecture rooms and laboratories, all of which, with the exception of those in the Engineering Department, were in full working order by the opening of the Session, on the 3rd October, 1911.

P. A. E. DOWLING,
Registrar.

METROPOLITAN SCHOOL OF ART, DUBLIN.

REPORT OF THE HEADMASTER FOR THE SESSION 1911-12.

The total number of students who attended the School during the Session 1911-1912, was 371, of whom 198 attended the day, and 173 the evening classes; these included 148 males and 223 females.

In the Personal Art Examinations, held under the Board of Education, the following number of successes were obtained in the subjects named:—

Freehand Drawing in Outline,	29
Model Drawing,	15
Drawing in Light and Shade from a Cast,	12
Geometrical Drawing,	12
Perspective,	12
Memory Drawing of Plant Form,	13
Drawing of Common Objects from Memory,	4
Design, Stage 1,	12
Design, Stage 2,	3
Design, Honours,	2
Anatomy,	11
Drawing from the Antique,	8
Drawing the Antique from Memory,	1
Painting Ornament,	4
Painting from Still Life,	10
Drawing from Life,	1
Principles of Ornament,	1
Architecture,	1
Modelling the Head from Life,	2
Modelling from Life,	2
Modelling from the Antique,	2
Modelling Design, Stage II.,	1
Elementary Modelling (held by the Department of Agriculture and Technical Instruction for Ireland)	6
Drawing on the Blackboard do.	6
Total,	170

King's Prizes were awarded to Ernest Corr for Excellence in Design, Stage 2, and to Francis Bowe for Modelling from the Antique.

The total number of works submitted to the Board of Education for Teachers' Certificates and for the National Competition was 189; of these 81 were for Teachers' Certificates.

The total number of works accepted for Certificates was 56, of which 45 were for the Art Class Teacher's Certificate, and 11 for the Art Master's Certificates, Groups I., II., and III.

In the NATIONAL COMPETITION the School was awarded one Gold Medal, four Silver Medals, five Bronze Medals, six National Book Prizes, and fourteen Commendations as below.

Gold Medal.—

Clarke, Harry, Designs for Stained Glass (Subject 23d).

Silver Medals.—

Hamilton, Letitia M., Design for Enamelled Panel (Subject 24a).

Hunter, Olive M., Design for Lace Berthe (Subject 23c).

O'Brien, James J., Model of a Figure from the Nude (Subject 19e).

Willis, Evelyn M., Studies of Plant Form (Subject 10).

Bronze Medals.—

Crilley, Margaret, Group in Oil Colours (Subject 15a).

Gray, Hilda S., Design for Lace Handkerchief (Subject 23c).

- Hunter, Grace C. H., Design for Irish Linen Damask Tablecloth (Subject 23c).
 Slaton, James S., Group in Oil Colours (Subject 15a).
 Wiles, Francis, Model of a Figure from the Nude (Subject 21).

National Book Prizes.—

- Ball, Ethel G., Model of a Figure from the Nude (Subject 19c).
 Duncan, Una, Model of a Figure from the Nude (Subject 19c).
 Garland, Alice C., Studies of Plant Form (Subject 10).
 Molloy, Austin, Design for Stained Glass (Subject 23d and 24a).
 Quigly, Ethel M., Studies of Plant Form (Subject 10).
 Willis, Evelyn M., Group in Oil Colours (Subject 15a).

Commendations.—

- Bowe, Francis D., Model of a Figure from the Nude (Subject 19c).
 Dawes, Bertha R., Design for a Lace Berthe (Subject 23c).
 Duffy, Mary E., Studies of Plant Form (Subject 10).
 Duncan, Una E., Model of a Head from Life (Subject 19d).
 Gray, Hilda S., Designs for Lace Collars (Subject 23c).
 Gröne, Rebecca H., Model of a Figure from the Nude (Subject 19c).
 Holland, Annie, Group in Oil Colours (Subject 15a).
 Hunter, Grace C. H., Design for a Lace Scarf (Subject 23c).
 Keating, John S., Studies of Plant Form (Subject 10).
 O'Byrne, Gerald, Study of Historic Style of Ornament in Stained Glass (Subject 22d and 24a).
 Rhind, Ethel, Time Sketches of Figures from the Nude (Subject 8c).
 Saville, William J., Studies of Plant Form (Subject 10).
 Seale, Phyllis, Design for Enamelled Plaque (Subject 24a).
 Tuohy, Patrick J., Oil Painting of a Figure from the Nude (Subject 17c).

The Metropolitan School of Art has this year kept up the record of the last three years by taking a distinguished place in the National Art Competition. A Gold Medal has again come to the School, and the year's lists of awards also includes four silver Medals, five Bronze Medals, six National Book Prizes, and fourteen Commendations for works done by the students in the various classes of decorative design, craft work, painting, modelling, and drawing. The Gold Medal work, consisting of a design of stained glass and a portion of the design carried out in the glass material by Harry Clarke has been very favourably noticed by the Examiners and by the Press, as a work of great imaginative power. Some of the other medal works have also been commented upon in complimentary terms. A very pleasing feature of the awards may be mentioned, namely, that one of the Silver, and one of the Bronze medals, together with three or four Commendations were obtained by students who sent in lace, crochet and damask linen designs, which represents industries that are distinctively Irish. It also may be mentioned that these results point to a great improvement in the design of these classes of fabrics.

The exhibit of students' works in stained glass, enamels, modelling, decorative design, painting and drawing, sent from the Metropolitan School of Art, together with work from other Schools in Ireland, to the Dresden Art Congress held a most honoured and distinguished position among the exhibits from Schools of Art of all countries represented at that Congress Exhibition, and unstinted praise was accorded to our students' works both by foreign experts and by the public Press.

Under the Local Prize Scheme for Session 1911-1912 prizes were awarded as follows:—

JUNIOR SECTION.

For the three students who gained the highest marks in the Junior Section (Day Class)—Violet Hunt, Nora O'Farrell, Dorothy Nicholson.

For the three students who gained the highest marks in the Junior Section (Evening Class)—Henry Dales, Maggie Flood, George McDonnell.

On completion of Art Class Teacher's Certificate—Agnes Cassidy, Bertha Dawes, David Dick, Una Duncan, Julie Hayden, Annie Holland, John Keating, Richard Long, Eileen Manning, Thomas Moylan, Margaret O'Keefe, Ethel Quigly, Ethel Stopford, Evelyn Willis.

On completion of Irish Secondary Teachers' Drawing Certificate—Emily Andrews, Elinor Carey, Alice Garland, Frank Harvey, Ethel Holdbrook, Thomas Moylan, Dorothy Nicholson, Ethel Quigly, Phyllis Wilson.

DESIGN SECTION.

For the best set of studies of Plants chosen with a view to and executed with appreciation of their decorative possibilities—Evelyn Willis, 1st; Ethel Quigly, 2nd.

For the best set of Historic Studies in preparation for Design—Agnes Cassidy.

For the best Designs for given subjects—John Keating.

For Designs for Lace—Olive Hunter, 1st; Hilda Gray, 2nd.

For Miscellaneous Designs adapted to the technical requirements of various materials, etc.—Una Duncan, 1st; Grace Hunter, 2nd.

For the best set of notes and sketches in connection with Advanced Design Lectures—Una Duncan.

For the best set of notes and sketches in connection with the Elementary Design Lectures—Dorothy Nicholson.

DRAWING AND PAINTING SECTION.

For the best Painting of a Figure subject from Irish History, Legend, Romance, etc., suitable for application as decoration for some Irish Public Building—Austin Molloy, 2nd.

For painting of the full length nude figure from life—Patrick Tuohy.

For painting of a Head from Life—James Slator.

For Time studies from the full length figure—Ethel Rhind.

For best set of drapery studies—Thomas J. Dillon.

For painting of a Head from an approved cast—Dorothy Wilson.

For drawing of an Antique Figure—Madeleine D'Arcy.

Memory Drawings of Antique Figure—William Garry.

Drawings of a Head, Hand, and Foot from approved casts—Patrick O'Byrne.

Painting of a Group of Still Life, in Oil Colours—Evelyn Willis.

Painting of a Group of Still Life, in Water Colours—Irene Lett.

MODELLING AND SCULPTURE SECTION.

Modelled Figure from Life (in the round)—James O'Brien.

Modelled Figure from Life (in relief)—Francis Wiles.

Modelled Design—Francis Wiles.

CRAFT CLASSES.

Enamelling—John Keating.

Metal Work—Margaret O'Keefe.

Enamelling and Metal Work combined—Dora K. Allen.

Stained Glass—Austin Molloy.

Count Plunkett, Director of the National Museum, for the fourth time, kindly offered two prizes for the best sets of studies from objects and examples of applied Art in the Museum. The prizes in this competition have been equally divided and awarded to Miss Margaret O'Keefe for a set of studies of Enamel and Metal Work, and to Miss Annie Kingston for a set of pottery studies.

The following Teacherships-in-Training, Art Scholarships and Silver-smiths' (Apprentice) Scholarships were renewed and awarded by the Department during the Session 1911-1912:—

Teacherships-in-Training—Una Duncan, John Keating, Mary L. Lynch, awarded.

Art Scholarships—Norma O'Kelly, James Slator, James J. O'Brien (Modelling), and Harry Clarke (Stained Glass), renewed.

Silversmiths' (Apprentice) Scholarships—Ralph Anderson, Michael Dunne (renewed), William Collins, Henry Dales (awarded).

Twenty-two Silversmiths' Apprentices attended the School for instruction in Drawing and design as applied to their trade, whose progress was highly satisfactory.

The Summer Courses of Art instruction to teachers of Secondary Schools was held at the School during the month of July last, and was attended by seventy-eight teachers. The Classes were under the supervision of the Headmaster, assisted by Mr. Luke, Mr. Orpen, Mr. Sheppard, Mr. O'Brien, Mr. Slator, Mr. Clarke, Mrs. Barden, Miss Jacob, Miss Emerson, Miss O'Kelly, and Miss Crilley. These classes were highly successful, and those attending worked extremely hard during the month, and it was remarkable to find such a great amount of work executed in the time at their disposal. The great majority of the teachers made undoubted progress in their studies, and were deeply sensible of the advantages they gained by being permitted to attend the courses.

The Branchardière Scholarship students, Miss Olive Cox, and Miss Lizzie Conlon, completed their course successfully, and are both now enabled by their training at the School to earn their living both by teaching and making lace and crochet.

The Woodcarving Class established last year under the tuition of Mr. Lang has proved of great practical use to many of the students. This class is well attended and is appreciated by many of our advanced students.

The new class in Architecture taught by Mr. George Lynes, Licentiate of the Royal Institute of British Architects, promises to develop into a very useful and valuable class. It is attended by five Architect's pupils and other students of the School. In addition to the class lectures given three times a week Mr. Lynes has taken the students out of doors to measure some of the interesting buildings of Dublin.

The Headmaster has given some lectures on Colour and other æsthetic points to the class in Architecture during the session, and has given on other occasions lectures on Art and Artists to the general students.

Landscape Classes were conducted during the month of July by Mr. George Lynes, when the students who attended the classes made many interesting studies and sketches of buildings and scenes in and around Dublin and the district.

At the Art Industries Exhibition of the Royal Dublin Society twenty-nine prizes were obtained by the students of the School for designs for lace, Crochet, Embroidery, Enamelling, Metal Work, Stained Glass, Wood Carving, Illuminating.

In the Competition for the Taylor Art Scholarship Prizes, four students of the School were successful, viz.: Mr. Patrick Tuohy awarded a Scholarship of £50; Prizes of £10 were awarded to Mr. Richard Long, Mr. Michael Whelan, and Mr. Harry Clarke.

I am pleased to say that the new crafts rooms for Enamelling, Metal-work, and Pottery are now erected, and that we shall shortly be occupying them. We have already transferred the work of the life modelling room to the new premises.

During the past session Mr. Orpen has continued the offering of prizes to students for pictorial composition, and we are also making a strong effort to advance the art of mural decoration, so as to try for the provision of an outlet for the students' powers in the domain of decorative painting.

The Annual Exhibition of the Students' works was held during the Christmas vacation, and was well attended by the public.

I have to thank Mr. Luke, and all the members of the teaching staff, and also Mr. Tilly, the Registrar, for their able and willing assistance, given me at all times, which has largely contributed to the efficient and satisfactory position which the School continues to hold.

JAMES WARD

Headmaster.

SUMMARY OF INQUIRIES MADE BY THE DEPARTMENT IN REGARD TO COMPLAINTS RECEIVED RESPECTING DELAYS IN THE CONVEYANCE OF MERCHANDISE BY CARRYING COMPANIES, AND DAMAGE TO CONSIGNMENTS DURING TRANSIT.

Complaint made previous to the 1st July, 1911, in respect of which action was not completed when included in the Summary printed in the Appendices to the Eleventh Annual General Report.

GREAT SOUTHERN AND WESTERN RAILWAY CO., GREAT WESTERN RAILWAY CO., 30th June, 1911.—That a half case of eggs forwarded on the 19th June from Waterford, via Rosslare to Herne Hill, London, was not delivered until the 28th June, and that then 200 eggs were found to be broken and 50 were missing.

It appeared that the half case reached London on the 21st June in apparently good condition and was on that date handed by the Great Western Railway Co. to a firm of carters for delivery to consignees. The firm were unable to supply proof of delivery, their delivery sheet being missing, but it was stated that they had no particulars or evidence of damage.

A claim made in respect of the consignment was met.

Complaints received during the period 1st July, 1911, to 30th June, 1912.

GREAT NORTHERN RAILWAY CO. (IRELAND), GREAT SOUTHERN AND WESTERN RAILWAY CO., 1st and 11th July, 1911.—That four casks of butter forwarded from Pomeroy on the 27th June to Cork were not delivered until late on the 1st July, and, that two casks sent from Pomeroy on the 4th July, four casks from Aughnacloy on the 5th July, and five casks from Dungannon on the 6th July, had not been delivered to consignee at Cor up to the 10th July.

The Great Southern and Western Co. stated that, so far as they were concerned, there was no delay in the transit of the consignments. The Great Northern Co. stated that, in each instance the traffic was received by them after the departure of the midday goods train, that there was no train to convey the butter until the following morning, and that the quantity of the traffic was not sufficient to justify the use by them of a through wagon. Arrangements were made whereby the Great Southern and Western Co. agreed to receive from the Great Northern Co. up to a late hour for conveyance by their night goods train from Dublin consignments which were previously not accepted after 5 p.m. In some instances a delay of twenty-four hours at Dublin would thus be prevented. The Department also understood that the Great Northern Co. would, when revising their time table, consider the question of improving the service for goods traffic forwarded to southern stations.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 5th July, 1911.—(1) That for the conveyance of iced fish closed vehicles should be provided instead of flat trucks or ventilated wagons, as the ice melted more quickly when there was a current of air through the wagon. (2) That there was not always sufficient help at Valentia Harbour Railway Station in the mornings, and that when there was a heavy catch of fish the staff was not large enough to deal with it in time.

(1) The Company stated that the ventilated wagons fitted to run with passenger trains were considered suitable for perishable traffic, and that the objection raised to them would not warrant the Company in providing specially constructed wagons for fish traffic. (2) The Company

stated that the staff at Valentia was found sufficient to deal with the regular fish traffic, and that when there was a heavy catch the Station Master had instructions to employ whatever temporary assistance was necessary.

GREAT WESTERN RAILWAY Co., 6th July, 1911; 22nd July, 1911.—That consignments of butter and eggs forwarded via Fishguard were damaged in transit.

An Inspector of the Department visited Fishguard and Paddington and reported as to the handling and condition of consignments. The Department communicated with the Great Western Co.

GREAT SOUTHERN AND WESTERN RAILWAY Co., GREAT NORTHERN RAILWAY Co. (IRELAND), 6th July, 1911.—That a mare forwarded on the morning of Friday, the 30th June, from Ballyhale to Banbridge did not reach the latter station until Saturday evening.

It was found that the mare was despatched from Ballyhale at 10.22 a.m. on the 30th June, arrived at Kingsbridge, Dublin, at 1.55 p.m., and was then put to livery. The animal was transferred to the Great Northern Railway Co. at Amiens Street the following morning. That Company had not a horse box available to convey the mare by the 10.45 a.m. train—the recognised train for the carriage of horses from Amiens Street to Banbridge. The animal was however forwarded by the 1.45 p.m. (Dundalk train), was conveyed from Dundalk to Scarva in a special train and arrived at Banbridge at the same time as if sent by the 10.45 a.m. from Amiens Street.

GREAT NORTHERN RAILWAY Co. (IRELAND), 8th July, 1911.—That butter arriving at Victoria Bridge Station in the morning for conveyance via Belfast was not forwarded from the station early in the day but was kept back until the arrival of the goods train from Derry at night.

It appeared that complainants were not entitled to a passenger train service for the traffic as the butter was conveyed at goods train rate, but that, as a special matter consignments sent during the hot weather at the time would be afforded a passenger train service by the Company.

GREAT NORTHERN RAILWAY Co. (IRELAND), 8th July, 1911.—That butter forwarded to complainant at Belfast from County Fermanagh was not delivered until the third day from the date of despatch.

Complainant did not furnish details in regard to any consignments that had been delayed. It appeared, however, that the time occupied in conveyance by goods train was about 36 hours. The needs of the case were met by sending by passenger train.

GREAT NORTHERN RAILWAY Co. (IRELAND), 13th July, 1911; 4th August, 1911.—That the pig industry was being seriously handicapped owing to the refusal of the Great Northern Railway Co. to carry pork from certain markets by passenger train to Enniskillen and Londonderry during the summer months.

It appeared that a passenger train service for pork was in operation to Londonderry via Portadown. In regard to Enniskillen the Company agreed to convey the traffic by the goods train leaving Dundalk at 1.20 p.m., the traffic to be forwarded from Clones by the 4.21 p.m. passenger train reaching Enniskillen at 6.30 p.m.

DUBLIN AND SOUTH-EASTERN RAILWAY Co., 13th July, 1911.—That a kiel of butter forwarded on the 12th July from Kilmacow to Dublin for one of the Department's Surprise Butter Competitions was damaged in transit.

A claim for 10s. in respect of the loss sustained was met.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LONDON AND NORTH WESTERN RAILWAY Co., 15th July, 1911; 24th July, 1911.—(1) That a consignment of butter sent from Boyle to Burton-on-Trent on the 6th July did not reach its destination until the 12th July. (2) That a consignment of butter sent from Boyle to Burton-on-Trent on the 17th July, did not reach its destination until the 21st July.

(1) It appeared that the butter was not shipped by the night boat at North Wall on the 7th July owing to the very large amount of traffic to be dealt with. The consignment was shipped on Saturday morning, the 8th July. Further delay took place at Holyhead owing to the seamen's strike and to the circumstance that there was not sufficient traffic to warrant a through load from Holyhead to Crewe on the 8th July. The wagon was held back for traffic from the Sunday boat and was sent forward on Monday morning, the 10th July. (2) The consignment was handed to the London and North Western Co. at North Wall on the 18th July, was sent from Holyhead on the 19th, dealt with at Derby on the 20th, and arrived and was delivered at Burton-on-Trent on the 21st.

The London and North Western Co. communicated with their officers at Crewe, Chester and other places, pointing out the necessity for having Irish butter expeditiously dealt with during transit.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 15th July, 1911, 10th August, 1911.—That in a half case of eggs, portion of a consignment forwarded on the 5th August from Kilkenny to London, three layers of the eggs were found to be broken.

It appeared on inquiry that the eggs were delivered in apparently good condition, and were signed for without remark.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 19th July, 1911.—That in a consignment of thirty 4-hhd. cases of eggs received in London from Waterford in June, fourteen cases were found to be in a badly damaged condition—over 1,000 eggs being broken.

It appeared that a claim made in respect of the damage was settled.

LONDON AND NORTH WESTERN RAILWAY CO.; 19th July, 1911; 24th July, 1911.—That consignments of poultry which were forwarded on the 13th July from places in Ireland to the Wholesale Market, Manchester, and which should have been delivered at 6 a.m. did not arrive until 2.30 p.m., the market being then over, that the consignments had to be held over until the following day, and that owing to the time occupied in transit and the prevailing heat the poultry had to be sold at reduced prices.

The London and North Western Railway Co. stated that the train by which the consignments were conveyed by them arrived late owing to heavy passenger train traffic.

GREAT NORTHERN RAILWAY CO. (IRELAND); LONDON AND NORTH WESTERN RAILWAY CO., 19th July, 1911.—That in three cases of eggs—part of a consignment forwarded from Markethill to London—210 eggs were found to be broken on delivery, and that 30 eggs were missing from one of the other cases.

A claim for 15s. in respect of the damage was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT CENTRAL RAILWAY CO., 19th July, 1911.—That 6 kegs and 11 pyramids of butter forwarded from Clonskilly to London were found to be broken when received on the 15th July, there being 4 lbs. waste in the kegs and 6 lbs. waste in 4 of the pyramids.

A claim of 15s. 4d. in respect of the loss sustained was met.

DUBLIN AND SOUTH EASTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 21st July, 1911.—That a hamper of dead fowl forwarded from Gorey to London, which should have been delivered on the morning of the 18th July, did not reach consignees until 1 p.m., a loss of 4d. per bird being occasioned by the delay.

It appeared from inquiries that owing to delay in conveyance from Harcourt Street Station to North Wall (due to a strike by carters) the hamper could not be forwarded by the London and North Western Railway Co.'s mid-day boat from North Wall on the 17th July.

DUBLIN AND SOUTH EASTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 21st July, 1911.—That four hampers of dead poultry which were forwarded from Gorey to London, and which should have been delivered at the Central Market early in the morning of the 15th July did not reach consignees until 10.15 a.m. on that date.

A claim for £1 5s. made in the matter was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 25th July, 1911.—That the Great Southern and Western Railway Co. declined to convey by the 3.5 p.m. train from Ennis, butter which had been forwarded on the 24th July from Kilrush to Cork.

The Company stated that owing to the late arrival at Ennis "of the West Clare Company's train from Kilrush, it was not possible to have the traffic transferred in time for the 8.35 p.m. train. The Company added that consignments were being forwarded by the goods train leaving Ennis at 9.45 p.m. by which service the butter reached Cork on the following morning.

GREAT WESTERN RAILWAY CO., 26th July, 1911.—That on the delivery in London on the 21st July of a consignment of fifty pyramid boxes of butter forwarded from Waterford, it was found that two of the pyramids were badly smashed, and that 60 lbs. of butter were missing.

A claim made in the case was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT NORTHERN RAILWAY CO. (IRELAND), 27th July, 1911.—That a box of butter sent from Cork on the 31st March to Carrickmacross was not delivered until the evening of the 4th April, and that a claim made in the matter had not been met.

It appeared that the butter had, in error, been forwarded to Carrick-on-Suir. The claim was settled by the Great Southern and Western Railway Co.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 1st August, 1911.—That five days were occupied in the conveyance of a consignment of butter—20 boxes—forwarded on 15th June from Charleville to Devizes.

The Great Southern Co. stated that the butter was handed to the Great Western Co. at Rosslare Harbour on the 16th June. The Great Western Co. stated that delivery was effected on the 19th June, and that as transfer was necessary at Bristol and as the 18th June was Sunday, the transit was a reasonable one. The Company added that the consignment only weighed 11 cwt. and that their regulations did not admit of a through wagon being loaded with that weight.

GREAT SOUTHERN AND WESTERN RAILWAY CO., AND OTHER COMPANIES, 2nd August, 1911.—That delay in the return of empty churns from Crewkerne, Evercreech, Stalbridge, and Yeovil to Charleville, was causing much annoyance and loss of business.

The Great Southern and Western Company's Superintendent of the Line stated:—"I have instructed our people to see to the punctual return of these cans, and have taken up with all the English Companies concerned, who inform me that they have issued similar instructions to their stations."

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 12th August, 1911.—That the arrangements for the conveyance of traffic between Tullamore and Horseleap and Streamstown were inadequate.

The Great Southern Company stated that the train service on the Tullamore, Clara and Banagher branches was given in connection with the Company's main line trains to and from Dublin and Cork at Portarlinton, that the regular flow of traffic was in both these directions, and that a better service could be afforded only by incurring additional expense

which would not be justified by the probable returns. The Midland Company stated that they regretted being unable to make any alteration in the train service between Clara and Streamstown. The service being provided in connection with their main line trains.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 12th August, 1911.—(1) That butter forwarded to merchants at the Butter Market, Cork, was delayed in delivery, the first load not arriving until 7.45 a.m. and deliveries occurring as late as 11 a.m. (2) That there was delay in transit and misdelivery in the case of empty butter packages forwarded from the Butter Market, Cork, to stations on the Great Southern and Western Railway Co.'s line.

(1) The Company stated that the delivery of butter from their Goods Store at Cork had not been quite satisfactory owing to congestion due to extensive alterations which were being carried out. (2) As regards the question of delay to empty butter boxes it appeared that this was in a great measure due to the boxes not being properly labelled, thus making it a difficult matter to handle the traffic when several consignments offered, and that action had been taken by the Company to impress on senders the importance of having the boxes fully labelled in future with a view to expediting transit.

GREAT SOUTHERN AND WESTERN RAILWAY COMPANY; GREAT WESTERN RAILWAY COMPANY, 17th August, 1911.—That a can of cream forwarded on the 3rd August from Devon Road Station via Rosslare to Dorchester had not been delivered up to the 14th August.

It appeared that the can was lost in transit. A claim for £8 9s. 8d. made in the matter was met in full.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 23rd August, 1911.—That a box of butter forwarded on the 23rd March from Cork to Roscommon was not delivered until the 28th March.

It appeared that the butter, which was forwarded by goods train service, reached Roscommon on Saturday, the 25th March, but that no application was made for it until Monday evening after the goods store had been closed.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT NORTHERN RAILWAY Co. (IRELAND), 25th August, 1911.—That two boxes of butter forwarded on the 13th April from Cork to Navan were not delivered until the 19th April.

It appeared that some delay occurred with the Great Southern Co. for which the Company expressed regret. The consignment was handed to the Great Northern Railway Co. on the 15th April and reached Navan on the 17th—Easter Sunday intervening—and the consignee, though verbally advised of the arrival of the butter on the 17th, did not take delivery until the 19th.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 26th August, 1911.—That in two cases of eggs sent from Waterford to London, 1 hhd. were found on arrival to be broken.

It was stated that the consignment reached Paddington Station in apparently good condition and was, on delivery, signed for without remark.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LONDON AND NORTH WESTERN RAILWAY Co., 1st September, 1911.—(1) That consignments of eggs forwarded from Galway to Manchester were damaged in transit. (2) That a consignment of eggs forwarded on the 25th August from Galway to Manchester was not delivered until the 30th August and then arrived in two lots.

(1) The Department had inquiries made in regard to the transit of certain consignments in respect of which particulars were furnished but did not ascertain where or how the damage occurred. It appeared that the carrying

companies concerned were not prepared to meet claims in respect of damage to the consignments which were conveyed at Owner's Risk.

An Inspector of the Department visited the premises of the consignors and made suggestions as to the better packing and handling of cases of eggs.

(2) The Department learned that some of the cases were conveyed from Holyhead in one wagon and the remainder in another and that on arrival at Manchester portion of the consignment could not be found in time to be delivered with the other cases. It was not ascertained where the delay in the conveyance of the consignment occurred.

MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE), 5th September, 1911.—That certain consignments of eels sent from Toomebridge to London and Birmingham via Larne and Stranraer arrived late for the markets.

The Committee stated that the delays had been caused by exceptionally heavy perishable traffic passing via the Stranraer route.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 6th September, 1911.—That butter and eggs sent by a firm in Tipperary to Manchester were carelessly handled during transit.

Complainants subsequently informed the Department that a satisfactory arrangement had been arrived at.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 9th September, 1911.—That 116 eggs were broken during transit in two half cases forwarded on the 2nd September from Kilkenny to London.

The Department were informed that the consignment was delivered in apparently good condition and was signed for without remark.

DUBLIN AND SOUTH EASTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 12th September, 1911.—That a consignment of 8 quarter cases of eggs—sent on the 2nd September from New Ross to London was damaged in transit.

It appeared that 7 of the 8 cases were delivered in apparently good order, and that the remaining case had become separated from the consignment and being found damaged, had been disposed of to the best advantage. The London and North Western Railway expressed regret for the occurrence.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 13th September, 1911; 16th September 1911.—That eggs forwarded from Loughrea to Manchester were damaged, delayed and pilfered in transit.

It appeared that consignments forwarded by complainant were conveyed for a considerable distance by road to Loughrea Station, and that in many instances cases showed signs of the contents leaking when delivered, at the station.

In October, 1912, the Department were given to understand that the claims made by complainant in respect of certain consignments of eggs had been satisfactorily settled, and that so far no further complaint had been made.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 14th September, 1911.—That in a half case of eggs forwarded on 5th September via Rosslare by a firm in Waterford to London, 70 eggs were found on delivery to be broken.

The Department were informed that the consignment was delivered in apparently good condition, a clear signature having been obtained.

DUBLIN AND SOUTH EASTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 14th September, 1911.—That in 12 quarter cases

of eggs sent on the 9th September from Waterford to London, 200 eggs were found on delivery to be broken.

A claim made by the senders in the matter was met.

GREAT NORTHERN RAILWAY CO. (IRELAND); G. & J. BURNS, LTD., 15th September, 1911.—That a box of butter—part of a consignment of 11 boxes—forwarded on 21st August from Omagh to Glasgow was not delivered.

A claim for £3 3s. made in respect of the missing box was settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 1st November, 1911.—

That the arrangements at Nenagh Station for the transit and delivery of goods were inadequate.

An Inspector of the Department interviewed the complainant who did not supply any particulars in support of his complaint as to the forwarding or delivery of goods. He complained, however, that on a recent date the Railway Co. had not any cattle wagons at the station. The Inspector made inquiry as to this complaint and learned that the wagons which should have arrived on the date in question did not arrive until the following evening. Due notice was, however, given by the stationmaster to the persons concerned that the wagons would not be available on the first day.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE; MIDLAND RAILWAY (NORTHERN COUNTIES COMMITTEE), 1st November, 1911.—That a consignment of 12 quarter cases of eggs forwarded on the 16th October from Donegal to London was damaged in transit.

It appeared that nothing was observed amiss with the cases until they arrived in London, when it was found on unloading that two cases were in loose order. Claims of £1 10s. 5d. made in the matter were met.

GREAT NORTHERN RAILWAY CO. (IRELAND), 2nd November, 1911.—

That the supply of vehicles for the conveyance of baled hay from Portadown to Belfast was inadequate.

It appeared that delays for which the Company were not responsible occurred in despatching loaded wagons from Portadown and in unloading at Belfast, and that but for these delays there would be no scarcity of wagons.

GRAND CANAL COMPANY, DUBLIN, 3rd November, 1911.—(1) That the wharf at Clondalkin was in bad condition, and that the canal opposite the wharf was in urgent need of dredging and repairs. (2) That the canal between Naas and Corbally was in bad condition and required dredging.

(1) In January, 1912, the Co. stated that repairs had been effected and that dredging had been carried out at Clondalkin. (2) On the 8th December the Company informed the Department regarding the Corbally section of the canal that "within the last two years a steam dredger has been working for a period of 5 months," and that the canal between the points was in a satisfactory condition. The Company added that that portion of the canal was not constructed on the same lines as the other portions of the Grand Canal, and that to bring it into conformity with the main line would cost a large sum of money.

Writing in October, 1912, complainants stated that the canal between Naas and Corbally was then in much better condition than formerly.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; DUBLIN AND SOUTH EASTERN RAILWAY CO., GREAT NORTHERN RAILWAY CO. (IRELAND), 8th November, 1911.—That for over a month the English Railway Companies had been refusing to accept for conveyance to Ireland (other than the North of Ireland) empties for holding rabbits, as they were unable to hand consignments to the Irish Companies—the Irish railways being congested owing to a strike of railway employees.

The Department were informed that as regards the Great Northern, Midland Great Western, and Dublin and South Eastern Companies no difficulty had arisen in accepting empties. The Great Southern Co. stated that delays had been occasioned by the strike.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 10th November, 1911.—That one dozen empty rabbit hampers sent on the 9th October from Manchester to Gorisker, Moyvalley, had not reached consignee up to the 10th November.

The Department had inquiry made. The hampers in question were not, however, traced.

GREAT NORTHERN RAILWAY Co. (IRELAND), 13th November, 1911.—That consignments of eggs forwarded from Castleblayney to London were delayed and damaged in transit, and that the claims made in respect of damage to several consignments had not been met.

The complainant was asked to furnish particulars as regards consignments that had been delayed or damaged, but did not do so.

(1) MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co. (2) GREAT SOUTHERN AND WESTERN RAILWAY Co., 14th November, 1911.—(1) That 6 empty rabbit hampers forwarded on the 18th October from Manchester to Mullingar had not arrived up to the 12th November. (2) (a) That empty rabbit hampers sent on the 11th September, 9th October and 18th October, from Manchester to Ballinascarthy had not been delivered up to the 13th November; (b) that of 20 hampers sent on the 11th October to Portarlinton only 4 had arrived up to the 11th November.

(1) The Midland Great Western Railway Co. stated that they were unable to trace the empties in question. (2) The Great Southern and Western Railway Co. stated that the only consignment they could trace was one, for a consignee in Portarlinton, of 10 empty hampers which were delivered on the 13th November.

BELFAST AND COUNTY DOWN RAILWAY Co. ; GREAT NORTHERN RAILWAY Co. (IRELAND), 14th November, 1911.—That as a result of competition at Castlewellan between the Great Northern and the Belfast and County Down Railway Companies the latter Company gave undue preference to consignors forwarding goods from Castlewellan to Belfast by their line, all available wagons being sent to Castlewellan to deal with the traffic, and that, on account of this, traders in Dundrum and district were inconvenienced.

The Belfast and County Down Co. stated that no undue preference was being given to Castlewellan in the matter of wagon supply, and that shortage was being caused by Belfast merchants detaining wagons under load.

LONDON AND NORTH WESTERN RAILWAY Co., 15th November, 1911.—That due care was not exercised in the handling of consignments of mackerel at North Wall, Dublin.

Inspectors of the Department observed the shipment of consignments. No instances of careless handling came under notice.

MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE); GREAT NORTHERN RAILWAY Co. (IRELAND); GREAT SOUTHERN AND WESTERN RAILWAY Co., 15th November, 1911.—(1) That 11 days were occupied in the conveyance of 2 barrels of apples forwarded on the 31st October from Moneymore to Lucan, and that on arrival the heads of the barrels were found to be broken, about half the apples being missing and the remainder in a badly damaged condition. (2) That a consignment of 2 barrels of apples forwarded on the 24th November from Moneymore to Lucan did not reach Lucan until the 29th November, and that one of the barrels was found to be broken, portion of the contents being missing.

(1) It appeared that the consignment was transferred by the Midland Railway Co. (Northern Counties Committee) to the Great Northern Railway Co. at Cookstown on the date of despatch and was handed by the latter Company to the Great Southern and Western Railway Co. at North Wall, Dublin, on the 3rd November. The Great Southern and Western Co. stated that owing to very great pressure and congestion of traffic

consequent on a strike of their employees, the consignment could not be sent forward from Dublin until the 9th November.

(2) It appeared that the consignment was handed by the Midland Railway Co. (Northern Counties Committee) to the Great Northern Co. at Cookstown, on the 25th November, was transferred by the latter Company to the Great Southern and Western Co. at North Wall on the 27th November (the 26th November was Sunday), and reached Lucan on the 28th November. The Great Southern and Western Co. stated that consignee at first declined to accept delivery, but ultimately accepted the consignment on the 6th December.

(1) and (2) The Department understand that the question of meeting claims made in respect of the consignments has not so far been settled.

LONDON AND NORTH WESTERN RAILWAY Co., 20th November, 1911.—That a crate of earthenware sent from Burslem, Staffordshire, to Carlow, on the 17th October, had not been delivered up to the 20th November.

It appeared that the delay in the conveyance of the crate was due to the dislocation of traffic, consequent on strikes by railway employees. The crate was delivered to consignee on 28th December, the charge for carriage was remitted, and a claim in respect of damage and costs was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 20th November, 1911.—That empty butter boxes were irregularly delivered and at times not delivered at all at Cork and outlying stations.

The Company issued an order requiring all empties to be fully addressed by means of a tacked-on label. It was stated that previously many empties had been addressed with lead pencil. It appeared that the Company's action removed the cause of complaint.

LONDON AND NORTH WESTERN RAILWAY Co., GREAT WESTERN RAILWAY Co., 20th November, 1911.—That consignments of dead meat forwarded from Macmine (Co. Wexford) by complainants to Smithfield Market, London, had been delayed in delivery, the time of delivery being usually about 8 a.m. and rarely earlier than 7 a.m. (to secure the best prices meat should be delivered at or before 5 a.m.) and that due care was not always exercised in the handling of consignments. (Early in 1912 the business was transferred from Macmine to Wexford).

The London and North Western Co. stated that for some time the normal working of their system had been dislocated owing to labour troubles. The Company also stated that they were re-issuing instructions as to the handling of consignments.

Arrangements were made by the Great Western Co. whereby consignments received at Rosslare could be sent forward from Fishguard the following day at 6.30 a.m. on two days of the week and at 1.30 p.m. on other days, delivery to be effected at Smithfield Market about 2 a.m. on the second day after despatch. The question of the careful handling of consignments was also taken up by the Company.

GREAT WESTERN RAILWAY Co., 21st November, 1911.—That a consignment of 41 boxes of butter forwarded from Ballingarry, Co. Limerick, to London on the 29th September, and delivered to the Great Western Railway Co. at Liverpool on the 5th October, had not been delivered to the consignee.

It was stated that at the time the consignment was forwarded the work of transport was not proceeding smoothly in consequence of labour troubles, and that in the case of the consignment referred to further difficulty was caused by the goods having been forwarded unaddressed, the means of identification being a certain mark. A claim made in the matter was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; CITY OF DUBLIN STEAM PACKET Co.; LONDON AND NORTH WESTERN RAILWAY Co., 23rd November, 1911.—(1) That 6 casks of butter forwarded on 11th November, from Carrrowmore

Station, Co. Sligo, to Ramsbottom, Lancashire, were not delivered until the 17th November; (2) That 3 casks of butter forwarded on the 13th November from Carrowmore Station to Hook, Chester, had not been delivered up to the 22nd November, (3) That a consignment of eggs forwarded on the 20th October from Carrowmore Station to Manchester was not delivered to consignees. Full information as to the transit in these cases has not so far been obtained.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 23rd November, 1911.—That consignments of fish forwarded on Saturday, 1st April, from Valentia Harbour to Leicester (8 boxes), Manchester (8 boxes), and Birmingham (20 boxes) were not handed to the London and North Western Railway Co. at North Wall till Monday morning, thereby missing the Monday market, a loss of £14 1s. resulting.

The Company refused to meet a claim in respect of the consignments, as the fish were sent at owner's risk, and as the delay was caused by a breakdown on the line.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 24th November, 1911.—That 5 cwt. wheat, consigned on 16th October from Athenry to Tomgraney, Co. Clare, via Killaloe and Scariff Pier, had been delayed at Limerick.

It appeared that the delay was due to congestion of traffic at Limerick following on the railway strike.

GREAT NORTHERN RAILWAY Co. (IRELAND), LONDON AND NORTH WESTERN RAILWAY Co., 25th November, 1911.—That eggs forwarded on Saturday by a consignor in Portadown to a firm in Birmingham did not reach their destination until late on Tuesday evening or Wednesday morning.

It appeared that the delivery of the consignments was usually effected on Monday.

GREAT NORTHERN RAILWAY Co. (IRELAND), 29th November, 1911.—That an empty pig crate forwarded from Ballyjamesduff to Goraghwood about the middle of November, and two crates forwarded from Strabane to Goraghwood on the 24th November, had not been delivered up to the evening of the 29th November.

It appeared that owing to a misunderstanding delay occurred in the forwarding of the crate sent from Ballyjamesduff.

The Company stated that the two crates from Strabane were despatched from that station on the 28th November, reaching Goraghwood on the morning of the 30th November, but that delivery was not taken until the 7th December.

WEST CLARE RAILWAY Co., 30th November, 1911.—(1) That the turf cutters of Doonbeg were unable to market their turf owing to the refusal of the Railway Company to provide them with wagons. (2) That a turf cutter at Doonbeg forwarded a wagon load of turf, which he had sold for 37s., to Ennis, and that delivery not having been effected the Company offered him only 28s. as compensation.

An Inspector of the Department interviewed the Railway Company's manager in the matter. The manager stated (1) that he had done all in his power to provide wagons, but that the people at Doonbeg took 3 to 4 days to load a truck, 2 days to discharge, whilst 1 day was spent in transit. The manager further stated that he was providing some ground at Doonbeg Station for the next season, where the people could draw in a store of turf and then load up the trucks in a few hours.

As regards (2) the manager stated that the wagon broke down at Corofin, and that the turf was sold and 35s. paid to the owner.

Seen subsequently by an Inspector of the Department, complainant stated that the facilities for the conveyance of turf had been improved.

GREAT NORTHERN RAILWAY Co. (IRELAND); MIDLAND GREAT WESTERN

RAILWAY OF IRELAND CO., GREAT SOUTHERN AND WESTERN RAILWAY CO., 2nd December, 1911.—(1) That goods forwarded by complainants from Belfast and Sligo to several stations on the Great Northern Railway, Midland Great Western Railway, and Great Southern and Western Railway systems were frequently delayed in transit. (2) That 30 bags of bran—portion of a consignment of 100 bags—sent from Sligo to Tuam on November 21st, were refused by consignee owing to damage in transit.

(1) It appeared that the firm used to consign feeding stuffs in wagon loads to interior stations, subsequently asking the station master in each case to divide the consignment among several customers. Delivery orders were not sent to customers and some delay was consequently caused. The firm arranged to forward a delivery order to each purchaser, the Railway Co. being authorised to deliver on demand of purchaser. Delays, it appeared, had occurred chiefly with small lots of goods, in the case of which transhipment was necessary. (2) The damage—"caking"—had apparently taken place before the goods were sent out from the firm's store.

GREAT SOUTHERN AND WESTERN RAILWAY CO., AND OTHER COMPANIES, 5th December, 1911.—(1) That empty cream churns returned from London, Liverpool, Reading, Market Drayton, Stranraer, and other centres to Newcastle West, were delayed and often lost in transit, and (2) that of eight new cream churns sent from London, only 7 had reached Newcastle West after 12 days.

(1) It appeared that the delay and loss complained of was principally to be attributed to the arrangements in force for the return of empty cream churns. Returned empties were carried free by the Railway Companies and were unaccompanied by either invoices or way bills, the labels on the cans containing the names and addresses of the owners being the guide relied on.

(2) The missing churn has not, it appears, been traced.

LONDON AND NORTH WESTERN RAILWAY CO., 5th December, 1911.—That a claim made by a trader in Keady, Co. Armagh, in respect of 10 cases of eggs which were forwarded by him to Bradford and which were not delivered to the consignee, had not been met.

The matter was satisfactorily settled.

CLOGHER VALLEY RAILWAY CO.; GREAT NORTHERN RAILWAY CO. (IRELAND); GREAT SOUTHERN AND WESTERN RAILWAY CO.; 6th December, 1911.—That two boxes of butter sent from Aughnacloy to Cork on the 29th November had not been delivered up to the 5th December.

It appeared that the delay was due to the consignment having become separated from the through invoice on the journey, and that the butter was delivered to the consignee on the 8th December.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 7th and 19th December, 1911.—(1) That four 56 lb. boxes of butter forwarded from Limerick on the 21st November to Dundee were not tendered to consignee until the 1st December, when delivery was not accepted. (2) That a box of butter forwarded on the 21st November from Limerick to Robertsbridge, Sussex, was not handed to consignee until the eighth day after despatch. (3) That a consignment of salt which arrived in Limerick on the 14th November was not delivered until the 16th November though repeated applications were made for delivery. (4) That creamery butter sent from Nenagh to Limerick on the 16th December was not delivered until 5 p.m. on the 18th December. (5) That 6 boxes of rolls forwarded from Limerick to Newry on the 12th December were not delivered until the 15th December. (6) That a 28 lb. box of butter sent from Limerick to Nenagh was not delivered for eight days. (7) That a box of butter sent from Limerick to Clara was not delivered for seven days.

(1) The consignment was handed by the Great Southern and

Western Co. to the London and North Western Co. in error and a claim made in the case was met. (2) It was not ascertained where and under what circumstances, the delay occurred. (3) The delay in the delivery of the consignment was due to the congested state of the store at Limerick. (4) The consignment was handed in at Nenagh on Saturday—the 16th December—late for that day's goods train, and was not, in consequence, despatched until Monday. (5) The consignment was transferred to the Great Northern Co. on the 13th December, and was delivered by them on the 15th December. Further details of the transit were not furnished. (6) The consignee was a vanner who suited his own convenience in taking delivery, consignments being held for him by arrangement until he called. (7) The box of butter was received on the 23rd November at Limerick and was delivered the following day.

GREAT SOUTHERN AND WESTERN CO.; LAIRD LINE, LTD.; G. & J. BURNS LTD.; LONDON AND NORTH WESTERN CO.; CALEDONIAN RAILWAY CO., 7th December, 1911.—(1) That a bag of salt sent from Limerick on the 4th December to Birdhill Station had not arrived up to the 6th December. (2) That of 6 boxes of butter sent on the 11th November from Limerick to Aberdeen, only four were delivered to consignee up to the 15th November. (3) That of 6 boxes of butter sent from Limerick to Aberdeen on the 30th November only 5 were delivered. (4) That a consignment of butter sent on the 25th November, and a consignment sent on the 30th November, from Limerick to Berkhamstead, Herts., had not reached consignee up to the 5th December.

(1) The Great Southern and Western Co. stated that the salt was received at Limerick late for the 4.40 p.m. goods train on the 4th December, that the ordinary service would have been the same train the following day, but that owing to scarcity of wagons due to unusually heavy traffic, it was not found practicable to forward the consignment until the 7th December, delivery being taken the following day. The Company added that at the time they had to give precedence to perishable traffic. (2) The Great Southern and Western Co. stated that the six boxes were transferred to the Laird Line at Dublin on the 13th November (Monday). The Laird Line informed the Department that the six boxes were handed to the Caledonian Railway Co. at Glasgow on the morning of the 15th November. The Caledonian Co., however, stated that 4 boxes were received by them on the 14th and the other two on the 15th November and that delivery of the boxes at Aberdeen was effected on the 15th and 16th November, respectively. The Department were unable to clear up the question as to the delivery of the boxes to the Caledonian Co. (3) Messrs. G. & J. Burns stated that one box had been lost in transit. A claim for £3 8s. made in the matter was met. (4) The London and North Western Co. informed the Department that the labels of the consignments became detached during transit, that the consignment sent on the 25th November was delivered on the 27th November to consignors' branch in London and that the other consignment was also forwarded to London and was delivered to consignees' London branch.

LONDON AND NORTH WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO.; 13th December, 1911.—(1) That a box of unsalted butter, consigned to Limerick per passenger train service from Watford on the 13th November, had not been received up to the 13th December. (2) That a consignment of boxes for the transmission of butter by Parcel Post, sent to Limerick on the 6th October from Yeovil had not been received up to the 13th December.

(1) The London and North Western Co. stated that they had been unable to trace the disposal of the box, but that a claim for its value, made by the senders, had been met. (2) The Great Western Co. stated that the consignment was handed to them on the 9th October and that they transferred it to the Great Southern and Western Co. at Waterford on the 14th October.

The latter Company stated that they were unable to trace the consignment, which had apparently been mislaid owing to the congestion of traffic consequent on the strike by railway employees.

(1) GREAT SOUTHERN AND WESTERN RAILWAY Co. ; LONDON AND NORTH WESTERN RAILWAY Co. ; (2) GREAT SOUTHERN AND WESTERN RAILWAY Co. ; GREAT WESTERN RAILWAY Co. ; 13th December, 1911.—(1) That a claim for £2 17s. 6d. made in respect of the non-delivery of a box of butter—portion of a consignment of 20 boxes—forwarded in July from Charleville to Liverpool, had not been met. (2) That a claim for £9 5s. made in respect of the non-delivery of a churn of cream, forwarded on the 31st October from Charleville to London, had not been paid.
(1) and (2) The claims were settled.

GREAT SOUTHERN AND WESTERN RAILWAY COMPANY, 14th December, 1911.—That a consignment of thirty boxes of butter forwarded on the 6th October from Abbeyfeale to Birmingham was not delivered until the 16th October, with consequent loss to consignors.

Complainants were asked whether a claim in the matter had been made, but no reply was received. The Great Southern and Western Railway Co. were unable to trace the receipt of a claim.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 14th December, 1911.—That the Great Southern and Western Railway Co. had given notice that they would not accept parcels or perishable produce at Mitchelstown station for conveyance by the 6.45 p.m. passenger train, running in connection with the 7.40 p.m. Rosslare Express.

The Company stated that they found it necessary to discontinue the conveyance of parcels from certain stations (including Mitchelstown) by the 7.40 p.m. Cork to Rosslare Express, but that the parcels traffic could be forwarded by the 4.20 p.m. train from Mitchelstown. It appeared that the latter service would not meet the needs of the case, as the English mail did not reach complainants until 3 p.m., and it would not be possible for them to prepare and despatch orders on the date of receipt. Subsequently the parcel service by the 6.45 p.m. train from Mitchelstown was to some extent resumed.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 18th December, 1911.—That a consignment of bacon sent from Cork on the 11th December was not delivered in Wexford until the 16th December.

The Company stated that the delay was due to the consignment having been mislaid at Waterford. A claim made in the matter was settled.

GREAT WESTERN RAILWAY Co. ; GREAT SOUTHERN AND WESTERN RAILWAY Co., 30th December, 1911.—(1) That of 15 boxes of butter sent from London to Limerick via Fishguard and Rosslare on the 19th December, 14 reached their destination on the 22nd while the remaining box did not arrive until the 30th December. (2) That of 20 boxes of butter, forwarded from London to Limerick on 22nd December, 16 arrived on the 27th, 3 on the 28th, and 1 on the 29th December.

(1) and (2) It appeared that the consignments had been forwarded under mark, the packages not being either labelled or addressed, and had got separated from the invoices while in transit. It was not found possible to ascertain where the delays had occurred.

GREAT WESTERN RAILWAY Co., 4th January, 1912.—That certain consignments of herrings which were sent from places in Ireland to Cardiff, and which arrived at Fishguard early on the morning of the 4th January, had not been delivered in Cardiff up to midday, the delay in delivery resulting in heavy loss to the salesmen as well as to the fishermen and merchants in Ireland.

The Company stated that the delay was due to the want of addresses or distinctive marks on the boxes, and that for this reason the fish could not

be got ready for despatch by the 6 a.m. ordinary train from Fishguard, but that a special train was provided for the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 4th January, 1912.—That two 56 lb. boxes of butter, portion of a consignment of 18 boxes, sent from Abbeydorney to Birmingham, were lost in transit, and that a claim for £5 13s. made in the matter had not been met.

The claim was settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 6th January, 1912.—(1) That sixteen 56-lb. boxes of butter forwarded on the 4th January from Ballyhaise to Limerick had not been delivered up to the 6th January. (2) That ten 56-lb. boxes of butter forwarded on the 5th January from Kildorrery to Limerick had been delayed in delivery.

(1) It appeared that the butter reached Limerick by goods train on the 7th January (Sunday) and was delivered on the following day. (2) It was stated that delivery was effected on the 6th January.

LAIRD LINE, LTD., 7th January, 1912.—That portion of a consignment of drain pipes consigned on the 16th November from Auchenheath, Hamilton, to Ballymoney, had not been delivered until the 3rd week in December and that the remaining portion had not been forwarded from Greenock up to the 26th December.

The Shipping Co. stated that the pipes were tendered to them on the 22nd November, but that owing to labour troubles for some weeks at Greenock they could only deal with urgent and perishable traffic. The Company also stated that the weather was exceptionally bad, disorganising sailings, and that the bar at Coleraine got into a bad condition, sailings having to be cancelled. The second portion of the consignment was shipped on the 8th January, via Portrush.

DUBLIN AND SOUTH EASTERN RAILWAY CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO., 13th January, 1912.—That a consignment of fruit trees forwarded on the 9th December from Wexford to Roscrea did not reach Roscrea until the 20th December.

It appeared that the Dublin and South Eastern Co. had duly handed the consignment to the Great Southern and Western Railway Co., and that the delay with the latter Company was due to disorganisation resulting from a strike of their employees together with pressure of Christmas traffic.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE; LONDONDERRY AND LOUGH SWILLY RAILWAY CO.; GREAT NORTHERN RAILWAY CO. (IRELAND); GREAT SOUTHERN AND WESTERN RAILWAY CO.; 15th January, 1912.—That a box of butter forwarded on the 15th December from County Donegal to Limerick did not reach its destination until the 11th January.

It appeared that the butter was handed in at Glenties Station on the 13th December addressed to senders' order at Strabane, where instructions were received as to the destination. The box was sent forward from Strabane without the original label having been removed and when it reached Dublin the railway officials there assumed that the box had been forwarded to Dublin in error and returned it to Strabane on the 18th December. Consignor, on receipt of advice that a box addressed to him was at Strabane, asked that it should be forwarded to his residence at Fahan, which was done. He subsequently discovered that the box should have been sent to Limerick and despatched it on the 8th January to that place. The Great Northern Co. stated that the mistake was in the first instance due to consignor not having provided a proper address for the box, but added that the Company's staff at Strabane were at fault for not having removed the original label and re-directed the box to Limerick. Having regard to the circumstances, the Company agreed to refund the total charges paid by consignee in respect of the conveyance of the butter.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 16th January, 1912.—That four days were occupied in the conveyance of a box of butter forwarded on the 28th December from Cork to Kilrane, Wexford.

The Company stated that the consignment reached Kilrane on the 30th December and was available for delivery on that date, but that the consignee, though advised of its arrival on the evening of the 30th, did not take delivery until the 1st January.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; GREAT NORTHERN RAILWAY CO. (IRELAND), 16th January, 1912.—That a steamer laden with coal had been awaiting discharge at the Railway Berth, North Wall, Dublin, from the 14th to the 16th January, owing to the railway companies failing to supply wagons, and that in consequence country traders, farmers, etc., had been unable to obtain their proper supply of coal.

It appeared that the delay was due, not to insufficiency of wagons, but to the vessel having been berthed at the Railway Company's cranes between two other steamers also awaiting discharge, instead of at the electric cranes as originally arranged. It further appeared that when the discharge of the vessel was completed it was found that 16 Great Southern and Western wagons in excess of the number ordered were actually required and that only one of 4 Midland Great Western Railway wagons ordered was used.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 22nd January, 1912.—That there was delay in the delivery of certain boxes of butter which reached Limerick station on the 22nd January, delivery not having been effected until after 2 p.m., and only 10 out of 11 boxes being then handed to consignee.

The Company stated that the butter arrived at 12.16 p.m., that complainant had been advised by telephone at 1.45 p.m., of the arrival of the consignment, and that the full consignment had been delivered on the date of arrival, the eleventh box, which had got separated from the others in the store, being delivered half an hour after them.

GREAT SOUTHERN AND WESTERN RAILWAY CO., AND OTHER COMPANIES, 25th January, 1912, 21st May, 1912.—(1) That claims amounting to £67 14. 6d. made from July, 1911, to January, 1912, in respect of the non-delivery of, pilferage from, and damage to packages of butter forwarded from Charleville to Banff, Kettering, Okeford, Fitzpaine, Ohan (2 lots), Aberdeen, Gourcock, Dunbar, Bedford, Bourne End (2 lots), St. Andrew's (2 lots), Ballater (2 lots), and Coldstream, had not been paid. (2) That claims made in respect of the non-delivery of cream forwarded from Charleville on the 12th August and 14th September, 1911, to Hull and Evercreech, respectively, had not been met.

(1) and (2) The Department were informed that, with the exception of one claim for £7 5s. in respect of a consignment of butter sent to Bourne End, the claims were settled. The question of meeting this claim is, the Department understand, not yet determined.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; DUBLIN AND SOUTH EASTERN RAILWAY CO., 26th January, 1912.—That eggs were abstracted during conveyance from a consignment sent from Tipperary to Kingstown.

It appeared that the consignment was delivered in apparently good condition to consignees.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 27th January, 1912.—That difficulty in developing a Cross-Channel new milk trade was experienced by creameries in the South of Ireland owing to the non-delivery of returned empty churns.

Particulars of cases in which empty churns did not reach the creameries were not supplied. Instructions for the punctual return of such churns were, it appears, issued by the Railway Companies.

GREAT NORTHERN RAILWAY (IRELAND) CO., 31st January, 1912.—That in one case—portion of a consignment of four cases of honey in sections—sent from Lisburn to Dublin, 61 sections were found on examination after delivery to be in a badly damaged condition, and that a claim made in respect of the damage had not been met.

The question of meeting the claim has, the Department understand, not yet been determined.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 31st January, 1912.—That four 56-lb. boxes of unsalted creamery butter forwarded on the 30th January from Limerick to Fiddown had not reached the latter station up to 4.30 p.m. on the following day.

It appeared on inquiry that the consignment met with some delay owing to an error in loading, and that when the mistake was discovered the boxes were sent to Fiddown by the next passenger train and reached that place about 7.30 p.m., on the 31st January.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 1st February, 1912.—That 8 empty butter boxes sent from Cork to Castleisland (2 being forwarded on each of the dates, January 13th, 17th, 22nd, and 24th), had not arrived at their destination.

It appeared that in each case the empties reached Castleisland on the day after despatch, and that consignees, whose premises were near the station, and whose men were informed that the empties were on hand, could have had delivery at any time after arrival.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 6th February, 1912.—That on the examination after arrival of a barrel of herrings forwarded on the 8th November, 1911, from Dublin to Cahir, it was found that the barrel was badly damaged and that some of the herrings were missing.

A claim made in the matter was met.

DUBLIN AND SOUTH EASTERN RAILWAY CO. ; GREAT WESTERN RAILWAY CO. ; 8th February, 10th February, 1912.—That delays occurred in the transit of consignments of dead meat forwarded from Enniscorthy to Smithfield Market, London.

The Great Western Railway Co. intimated that action had been taken to impress upon their staff the urgent requirements of the traffic.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE ; MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE) ; GREAT WESTERN RAILWAY CO. ; 8th February, 1912.—That five 6-hhd. cases of eggs forwarded on the 1st February from Donegal to London did not reach their destination until the 5th February.

It appeared that the delay was due to some disorganisation at Liverpool in consequence of which the steamer did not get its usual berth, and the goods could not be forwarded from Liverpool by the regular train.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. ; LONDON AND NORTH WESTERN RAILWAY CO. ; 10th February, 1912.—That a bag of escallops sent from Recess to London on the 27th January was not delivered.

Inquiries were made in the matter but particulars as to the transit were not obtained. It appeared, however, that the bag was tendered to consignees and refused, and that a sum of 16s. 7d. was paid in settlement of a claim made in the matter.

GREAT WESTERN RAILWAY CO., 12th February, 1912.—That of a consignment of 27 sides of beef forwarded on 3rd February from Co. Wexford to London, 9 sides only arrived in time for the market on the 5th, that the remaining sides were not delivered until the 6th and could not be sold until the 7th, a loss of £13 resulting.

The Company stated that the delay was due to a breakdown en route.

CLYDE SHIPPING Co., 13th February, 1912.—That in a case of eggs (720) forwarded from Waterford via Newhaven to St. Leonards-on-Sea 45 eggs were found on delivery to be broken.

The Company stated that the case was delivered to all outward appearance in good condition, and that no complaint had been received from the consignee, who gave a clear signature.

MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE), 14th February, 1912.—That the supply of wagons for the conveyance of farm produce to Londonderry from Coleraine and from stations between Coleraine and Londonderry was inadequate.

From inquiries made by the Department it appeared that the complaint had special reference to the transit of hay, and that the shortage was largely due to wagons being detained under load with hay for several weeks both at Londonderry and Coleraine. It was stated that the Company would do their best to have wagons available for all demands.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 15th February, 1912.—That 30 boxes of unsalted butter forwarded on 27th October, 1911, from Charleville to Blackfriars Station, London, did not reach the station until the 6th November, and that owing to the delay a loss of £6 was sustained.

It appeared that the butter was transferred to the Great Western Co. at Rosslare on the 28th October and reached Paddington on the 30th October, but that owing to a misunderstanding it was not delivered at Blackfriars Station until the 6th November. The claim was met.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LAIRD LINE, LTD., 19th February, 1912.—That 20 kegs of butter forwarded on the 26th July from Killeshandra via Dublin to Aberdeen did not reach consignees for seven or eight days.

The Midland Great Western Railway Co. stated that the consignment did not reach North Wall, Dublin, in time to be dealt with on the evening of the 26th July, that it was handed to the Laird Line on the following day and that delivery was effected on the 31st July. It appeared that some delay had occurred owing to an error in booking.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE; LAIRD LINE, LTD.; MIDLAND RAILWAY Co. OF ENGLAND; 22nd February, 1912.—That two boxes of eggs sent on February 19th, from Donegal to London via Heysham, were not delivered until the 22nd.

It was stated that the eggs arrived at St. Pancras Station, London, on the 21st February, but that the Midland Railway Co. did not receive instructions for the disposal of them until the following day.

LONDONDERRY AND LOUGH SWILLY RAILWAY Co., 22nd February, 1912.—(1) That consignments of fish forwarded from Buncrana to places in England were frequently late for market, and that consignments or portions of consignments were in many instances lost in transit. (2) That sufficient accommodation was not available for fish traffic at the loading bank at Buncrana Station. (3) That inconvenience was caused to complainant by the non-delivery of returned empty fish boxes and barrels.

It appeared that a deputation of fish merchants was received by the Chairman of the Company when these matters, *inter alia*, came up for discussion. Action was, it was understood, promised on behalf of the Company with a view to meet the requirements of the traffic regarding the points raised by complainant.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 27th February, 1912.—That 10 quarter cases of eggs—portion of a consignment of 15 quarter cases—sent from Waterford to London were found on arrival to be in a badly damaged condition.

The Great Western Railway Co. stated that some damage to the con-

shipment had taken place while in their possession, that the strictest and closest investigation had been made, but that it had not been ascertained where or how the damage had been occasioned. The Company added that the goods had been conveyed at Owner's Risk, that the damage was not due to misconduct on the part of the Railway Companies' servants and that in the circumstances a claim which had been made by the consignees in respect of the loss had been declined.

GREAT SOUTHERN AND WESTERN RAILWAY CO. ; LONDON AND NORTH WESTERN RAILWAY CO., 27th February, 1912.—That on the examination after delivery of nine quarter cases of eggs forwarded from Tralee to London it was found that four of the quarter cases were damaged at the ends, that several eggs were broken in each box and that a large proportion of those not broken were damaged through contact with or leakage from the broken eggs.

It appeared that the eggs reached London in apparently good condition but that on delivery four cases were signed for as very badly damaged. The London and North Western Co. stated that they had re-issued instructions as to the necessity for the careful handling of egg traffic. A claim for £2 8s. 3d. made in respect of the damage to the consignment was met.

LONDON AND NORTH WESTERN RAILWAY CO., 6th March, 1912.—That on the 27th February, Irish eggs were conveyed by the London and North Western Railway Co. in uncovered lorries, from Liverpool Road station, Manchester, for delivery, though heavy rain was falling, the eggs having consequently to be repacked.

It appeared that the Company had investigated the complaint and did not find that any of their lorries delivering eggs had been left uncovered on the date in question. The station record of the weather did not show that heavy rain had been falling. It was stated, however, that the effect of the inquiry had been to make the Company's officials more watchful regarding the proper protection of egg traffic in the course of delivery.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 8th March, 1912.—That from 3 to 5 days were occupied in the conveyance of eggs sent from Laffan's Bridge via Dublin to Glasgow.

The Department found that the time occupied in transit from Laffan's Bridge to Glasgow via Dublin was a little over 48 hours, there being a service daily, except on Sundays.

AYR STEAM SHIPPING CO. ; NORTH EASTERN RAILWAY CO., 12th March, 1912.—That from 4 cases of eggs—portion of a consignment of six cases—forwarded on the 23rd February from Belfast to Newcastle-on-Tyne it was found on delivery that 55 eggs were missing.

The Ayr Steam Shipping Co. stated that inquiries were made in the matter but that it had not been ascertained where the eggs were abstracted. A claim for 5s. 6d. in respect of the missing eggs was met.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. ; LONDON AND NORTH WESTERN RAILWAY CO., 13th March, 1912.—That a consignment of oysters forwarded on the 23rd January from Oranmore to London was not delivered until the 26th January, a loss of £1 4s. resulting.

It appeared that delivery was effected at 1.30 p.m. on the 25th January. The London and North Western Co. declined to meet a claim in the matter as the consignment was conveyed at Owner's Risk.

LONDON AND NORTH WESTERN RAILWAY CO., 13th March, 1912.—That consignments of eggs forwarded from Ireland via Dublin and Holyhead to Manchester were often found on arrival at their destination to be in a damaged condition and that eggs were frequently abstracted during the transit of consignments.

The Department brought the matter under the notice of the London

and North Western Railway Co. Arrangements were made by the Co. to have the traffic specially watched at Dublin, Holyhead, and Manchester. In August the Department were given to understand that consignments had for some time been reaching their destination in better condition.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 16th March, 1912.—That in the case of two boxes of creamery butter forwarded by a Dairy Society in County Tipperary to Dublin, the butter was removed from the boxes and inferior substances substituted during transit.

Samples of the substances obtained on behalf of the Department proved on analysis to be margarine.

Legal proceedings against the Great Southern and Western Railway Co. were successfully instituted in the case by the Dairy Society.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE; MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE); G. & J. PURNS, LTD., 18th March, 1912.—That 3 cases of eggs forwarded on the 11th March from Donegal via Belfast to Glasgow were not shipped from Belfast until the 13th March.

It appeared from inquiries made in the matter that the cases (which were forwarded under mark) were, as the result of a clerical error, consigned to Belfast instead of to Glasgow and that a delay of one day occurred at Belfast owing to the absence of shipping instructions.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LAIRD LINE, LTD., 26th March, 1912.—That from a box of butter—portion of a consignment of seven 56-lb. boxes—forwarded in March from Co. Tipperary to Glasgow it was found that about 2 lbs. were missing.

From enquiries made by the Department in the matter it appeared that the consignment was delivered without remark on the part of the consignees. Writing on 3rd June, complainants stated that for some time no pilfering from any of their consignments had occurred.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 4th April, 1912.—That two 56-lb. boxes of butter forwarded from Thurles on the 1st April were not received by consignee at Killaloe until the 3rd April.

The Company expressed regret that through a misunderstanding in forwarding the consignment from Thurles the butter was not available for delivery on the 2nd April.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE, 4th April, 1912; 12th April, 1912.—That eggs were broken during transit in consignments forwarded to Donegal on the 20th December and 21st March from Teelin and 7th March from Killybegs.

The County Donegal Railways Joint Committee stated that, as regards the consignments from Teelin, the eggs were carefully handled by their staff at Killybegs and were conveyed by passenger train to Donegal where the station master supervised the loading into the consignee's cart. The Committee added that the consignments were carted from Teelin, a distance of 10 miles over a hilly road, to Killybegs station; that the eggs were packed in old tea chests and soap boxes and that sufficient straw had not been placed at the sides of the packages. The breakage in the consignment forwarded from Killybegs was, the Committee stated, due to insufficient packing.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 9th April, 1912.—That a box of butter forwarded on the 2nd April from Cork to Ballinrobe was not received by consignee till the evening of the 6th April.

From inquiries made in the matter it appeared that the butter was transferred by the Great Southern and Western Co. to the Midland Great Western Co. at Claremorris on the 4th April and was sent forward from Claremorris on the 6th, no service being available for the traffic between

Claremorris and Ballinrobe on the 5th April (Good Friday). It appeared that a more expeditious route for the consignment would have been via Dublin.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 9th April, 1912.—That one package of butter—portion of a consignment of 250 packages—sent from Limerick to London was not delivered, that another of the packages was tendered to consignees in such a damaged condition that delivery was refused and that a claim for £6 4s. made in respect of the packages had not been met.

The claim made in the matter was settled.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co.; 9th April, 1912; 16th April, 1912.—That butter sent to London from Ardagh in October and November, 1911, and April, 1912, from Thurles in October, 1911, and from Limerick and Rathkeale, in April, 1912, was delayed in transit, and that butter sent from Limerick to London in October, 1911, was not delivered.

It appeared that a satisfactory settlement was made with senders.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 10th April, 1912; 22nd May, 1912.—That in 10 consignments of eggs—800 dozen—forwarded between 4th March and 11th May from Kildare Station to Dublin 306 eggs were broken in transit.

The Company stated that the consignments were delivered in apparently good order, that close inquiry was made as to the handling but that it was not ascertained how or where the breakages occurred. The Company added that the eggs were carted a distance of five miles to Kildare station.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE, 10th April, 1912.—That in a box of eggs received at Donegal on the 10th April from Teelin, there were 37 eggs broken.

The Committee's Traffic Superintendent stated that the eggs, which were packed in an old tea chest, had been carted a distance of nine miles to Killybegs station, and that on arrival there, egg matter had been found oozing from the bottom of the box. An officer of the Department had an interview with complainant in regard to the use of suitable cases for the conveyance of eggs.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 11th April, 1912.—That claims amounting to £76 made in respect of the non-delivery of 9 churns of cream forwarded between 14th August, 1911, and 4th April, 1912, from Abbeyfeale and Newcastle-West to Paddington, Harrogate, and Liverpool, had not been met.

In November, 1912, the Department were informed that all the claims, except one for £13 in respect of 2 churns sent to Harrogate, had been settled. The question of meeting this claim has, the Department understand, not been decided.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 19th April, 1912.—(1) That 6 boxes of butter sent on 15th April from Killeshandra to Dublin were not delivered until the morning of the 17th. (2) That 5 boxes of butter sent from Killeshandra to Dublin on the 17th April had not been delivered up to 9 p.m. on the 18th April.

The Railway Co. stated that the consignments in question, having been forwarded during the period of the dislocation of the train service and the congestion of traffic consequent on the coal miner's strike, had been delayed owing to the goods trains running late.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 19th April, 1912.—That sufficient wagons were not available at Limerick station for the conveyance of complainants' goods.

Complainants were asked for particulars as to shortage of wagons, but

did not reply. In October an Inspector of the Department was informed by complainants that they had then no complaints as to shortage.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; G. & J. BURNS, LTD.; CALEDONIAN RAILWAY Co.; 20th April, 1912; 24th April, 1912.—That twenty-four 28 lb. boxes of butter sent from Killeshandra on the 15th April to Aberdeen were not delivered until the 22nd April.

The Midland Great Western Co. stated that the consignment had not been handed to Messrs. G. & J. Burns (Dublin) until the 17th April owing to their goods train running late on account of the coal miners' strike. Messrs. G. & J. Burns stated that the consignments had been handed by them to the Caledonian Railway Co. at Glasgow on the 18th April and had been delivered at 7.30 a.m. on the 20th; but that, if the train service had not been somewhat restricted on account of the strike the consignment would have reached Aberdeen on the 19th April.

CORK, BANDOON AND SOUTH COAST RAILWAY Co., 23rd April, 1912.—That the Company would not convey complainants' stallion from Ballineen to Skibbereen on Saturdays by the 10 a.m. train and return the animal by the 7.25 p.m. train from Skibbereen.

It appeared that the horse could not be carried by the 10 a.m. train from Ballineen as this was a mail train which was always heavily loaded. The Company were prepared to convey the horse by the 6.45 a.m. train from Ballineen. Arrangements were made for the return of the horse by the 7.25 p.m. train from Skibbereen.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 26th April, 1912.—That complainants had great difficulty in getting a sufficient supply of goods wagons at Limerick. (2) That rats caused considerable damage to complainants' goods at some of the Great Southern and Western Railway Company's stations, especially Cahir.

(1) The Company stated that they could not trace the receipt of any recent complaint from the firm in regard to shortage of wagons and added that difficulty in supplying wagons was experienced after the coal miners' strike owing to congestion of traffic.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 29th April, 1912.—That six boxes of butter forwarded on the 26th of April from Killeshandra to Dublin were not delivered up to 5 p.m. on 27th April.

The Company stated that the consignment had been forwarded from Killeshandra by the 4.25 p.m. train on the 26th April and was delivered on the following day. The delay, it appeared, was due to dislocation of the train service caused by the coal miners' strike.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LONDON AND NORTH WESTERN RAILWAY Co., 1st May, 1912.—That 11 half cases of eggs forwarded on the 16th April from Castlereagh to Birmingham did not reach their destination until the evening of the 22nd April.

It appeared that the delay was due to congestion of traffic consequent on the coal miners' strike.

DUBLIN AND SOUTH EASTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 2nd May, 1912.—That a hamper of 36 chickens forwarded on the 27th July, 1911, from Rathdrum to Putney, London, did not reach its destination until the 29th July, that on the arrival of the hamper it was found that six birds were missing and that the remaining birds were in bad condition.

A claim for £1 in respect of the loss was met.

DUBLIN AND SOUTH EASTERN RAILWAY Co.; GREAT SOUTHERN AND WESTERN RAILWAY Co., 2nd May, 1912.—That a premium bull forwarded on the 19th April from Kingsbridge to Castleisland did not arrive until the afternoon of the 25th April.

It appeared that, on the 19th April, the animal was forwarded from the Dublin and South Eastern Company's siding at Ballsbridge and delivered to the Great Southern and Western Co. at Kingsbridge. The Dublin and South Eastern Co. stated that the bull was booked in error to Tralee instead of to Castleisland, that they were informed on 24th April of the animal's arrival at Tralee, that inquiries were then made and that instructions as to disposal were given on the morning of the 25th April.

DUBLIN AND SOUTH EASTERN RAILWAY Co., 4th May, 1912.—That a wagon, in which goods—including 32 bags of flour and one box of bacon—forwarded to complainants were conveyed, had not been properly cleaned before use.

Arrangements were made by the Company to ensure that clean wagons would be made available for the conveyance of complainants' goods.

GREAT NORTHERN RAILWAY Co. (IRELAND); MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE), 6th May, 1912.—That owing to arrangements at Cookstown, pork was in summer delayed six hours in delivery, with consequent loss to farmers in the Cookstown district.

It appeared that the complaint had reference to consignments of pork sent from Cookstown to Belfast. The Department learned that prior to the railway strike a special train available for the traffic via Portadown left Cookstown on market days at 10.45 a.m. and that the train connected at Portadown with a passenger train due at Belfast at 12.40 p.m. After the strike this special train was not run. There was, however, a Great Northern Railway goods train from Cookstown at 12.45 p.m. due at Belfast about 5.30 p.m., and a Midland Railway goods train at 10.15 a.m. and a passenger train at 12.40 p.m. due, respectively, at Belfast at 4 p.m. and 2.40 p.m.

The Great Northern Co. arranged to restore, as from the 1st June, the 10.45 a.m. train from Cookstown on market days.

MIDLAND RAILWAY Co. OF ENGLAND, 7th May, 1912; 31st May, 1912.—That 33 half cases of eggs which were forwarded on the 16th March from Cork via Liverpool to Birmingham and which reached Liverpool on the 18th March were not delivered until the 25th March.

The Company stated that the delay was due to congestion of traffic and a restricted service consequent on the coal miners' strike.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co. AND OTHER COMPANIES, 8th May, 1912.—That 23 boxes of butter, portion of a consignment of 24 boxes, sent on the 17th April by passenger train service from Killeshandra to Aberdeen were not delivered until the 23rd April.

A refund of £1 2s. 5d.—the difference between the charges for the conveyance of the consignment at the passenger and the goods rates—was made.

CLYDE SHIPPING Co; LONDON, BRIGHTON AND SOUTH COAST RAILWAY Co., 8th May, 1912; 15th May, 1912.—That consignments of eggs forwarded on the 23rd March, 20th April, and 4th May, from Waterford to St. Leonard's-on-Sea were damaged in transit and that claims made in respect of the damage had not been met.

The Clyde Shipping Co. stated that a claim made in respect of the consignment sent on the 23rd March was declined as the consignment was carried at Owner's Risk, that the other consignments were also carried at Owner's Risk, but that so far as they could trace no claim was made in regard to them.

GLASGOW AND SOUTH WESTERN RAILWAY Co.; NORTH EASTERN RAILWAY Co., 9th May, 1912.—(1) That 2 half-cases of eggs consigned on the 26th April from Londonderry via Glasgow to York and forwarded from Glasgow on the 27th April were not delivered until the 4th May. (2) That 2 half cases of eggs consigned on the 1st May from Londonderry via Glasgow

to York and forwarded from Glasgow on the 2nd May had not been delivered up to a late hour on the 8th May.

It appeared (1) that some delay occurred at Gateshead owing to the coal miners' strike, that the half cases although consigned to York were invoiced to Darlington where they arrived on the 1st May, that advice of the arrival of the eggs at Darlington was then posted to consignees in York and that on the 2nd May disposal instructions were received and the consignment sent to York; (2) that the delay was due to the traffic having been entered to Darlington instead of to York and that the consignment was delivered at York on the 11th May.

LONDON AND NORTH WESTERN RAILWAY Co., 17th May, 1912.—That certain cases of eggs forwarded from Tipperary via Liverpool to Manchester were found on arrival to be in a badly damaged condition.

It appears that due care had not been exercised in the loading of the wagon in which the cases were conveyed from Liverpool. The Department communicated with the London and North Western Railway Co. in the matter. The Company replied to the effect that suitable action had been taken regarding the loading of the cases at Liverpool.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 18th May, 1912.—That 18 quarter cases of eggs which were tendered to the Great Southern and Western Railway Co. at Tipperary at 7.30 p.m. on the 11th May, for conveyance via Dublin and Holyhead to Liverpool were refused by the Company until the route was changed to via Waterford.

The Company stated that the consignment was tendered to them on the 11th May at the hour mentioned, that it was then late for forwarding via Dublin on that date and that senders' carrier asked to have the eggs sent via Waterford and altered the consignment note accordingly without suggestion or pressure on the part of the Company's servants.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 18th May, 1912.—That in a consignment of twenty 6-hhd. cases of eggs forwarded at Company's risk on the 24th February from Tipperary to Blackpool, 309 eggs were broken in transit and that a claim made in respect of the loss was not met.

The Great Southern and Western Railway Co. stated that they were informed by the London and North Western Railway Co. that the breakages extended over the whole consignment. The Company added that the damage appeared to be due to bad packing or to have occurred during the process of packing and that consequently the claim made in the matter had been declined.

(1) and (2). LONDONDERRY AND LOUGH SWILLY RAILWAY Co.; GREAT NORTHERN RAILWAY Co. (IRELAND); (3) GREAT NORTHERN RAILWAY Co. (IRELAND); MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; 18th May, 1912.—(1) That a claim for £1 10s. made in respect of delay in the transit of 3 barrels of herrings forwarded on the 17th February from Buncrana to Carrickmacross had not been met. (2) That a claim made in respect of the non-delivery of a barrel of herrings—portion of a consignment of 6 barrels—forwarded from Buncrana to Carrickmacross had not been met. (3) That a claim for £1 made in respect of delay in the transit of a barrel of herrings forwarded from Kilkeel to Kilmainham Wood had not been met.

Inquiries were made by the Department in each case. (1) A sum of 20s. was paid to complainant in respect of the delay. (2) It appeared that the barrel was delivered to a trader in Kells. The matter was satisfactorily arranged so far as complainant was concerned. (3) The claim was settled by payment of 15s.

LONDON AND NORTH WESTERN RAILWAY Co., 18th May, 1912.—That eggs forwarded from Milltown, Co. Kerry, and from Armagh and district via the London and North Western Railway Co.'s route to London were delayed in transit.

The Department asked complainants to supply particulars as to consignments which were delayed in transit. Particulars were not supplied.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 19th May, 1912.—That a consignment of butter forwarded on the 13th May, from Milford, Charleville, via Rosslare and Fishguard to Stratford-on-Avon had not been delivered up to the 17th May.

The Great Southern Co. stated that the consignment was shipped from Rosslare on the 14th May. The Great Western Co. stated that delay occurred to the consignment owing to the restriction of service consequent on the coal miners' strike.

LONDON AND NORTH WESTERN RAILWAY Co., 20th May, 1912.—That the London and North Western Railway Co. had refused to supply hampers for the carriage of offal forwarded to Liverpool by complainants (a firm in the dead meat trade).

The Department communicated with the Company in the matter. The Company stated that they did not supply hampers for the carriage of offal traffic.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 22nd May, 1912.—That a box of butter forwarded on the 14th May from Limerick to Bedford had not been delivered up to the 20th May.

It appeared that delay occurred between Holyhead and destination owing to the wagon in which the butter was loaded being sent in error to Slaitwaite. The Department were informed that due notice of the irregularity had been taken by the London and North Western Railway Co. It was stated that delivery was effected on the 21st May.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; CITY OF DUBLIN STREAM PACKET Co.; LANCASHIRE AND YORKSHIRE RAILWAY Co.; 22nd May, 1912.—That 14 boxes of unsalted butter forwarded on May 8th from Tralee via Dublin to Manchester did not reach their destination until the 13th May, that the boxes were then found to be in a dirty and broken condition, that consignee refused to accept delivery and that the butter was sent to cold store and sold at a reduced price.

It appeared that the consignment reached Dublin on the 9th, and Liverpool on the 10th May, and was then in apparently good condition, but that, owing to congestion of traffic the butter was not despatched from Liverpool until the 11th May (Saturday) arriving at Manchester on Monday. It was not ascertained how or where the damage occurred. The Department were, however, informed that the Lancashire and Yorkshire Co. had taken suitable notice of the matter.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co.; 22nd May, 1912.—That 20 boxes of butter, portion of a consignment of 35 boxes forwarded on the 15th May from Tralee via Dublin to Manchester, were not delivered until May 20th.

It appeared that the consignment was transferred to the London and North Western Railway Co. at Dublin on 16th May, and that the delay was primarily due to the circumstance that 15 of the boxes were in one wagon and 20 in another, that the former wagon was unloaded in time for the shipment of the goods by the midday boat but that, owing to the volume of traffic to be dealt with, the 20 boxes were not shipped until the 7.30 p.m. boat. It also appeared that owing to pressure of traffic the boxes were not despatched from Holyhead in time for the first train service to Manchester, that they reached Manchester on the 18th May (Saturday) and were delivered on the morning of the 20th May.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 22nd May, 1912.—That in a case of eggs forwarded on the 16th May from Kilrush via Waterford and Liverpool to Manchester, 2 hhd. were broken in transit.

The Great Southern and Western Co. informed the Department that they were unable to trace the passing of a case on the 16th.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 23rd May, 1912.—That consignments of butter forwarded from Tipperary to Manchester were delayed in delivery and that all the packages of consignments were not delivered together. As a specific instance it was mentioned that portion of a consignment of 20 kegs forwarded on May 18th was delivered on the 20th May, and the remaining portion on the following day.

From inquiries made by the Department in the matter it appeared that the 20 kegs were delivered on the 21st May. The Great Southern and Western Co. expressed regret that there had been some delay in the transit of the consignment and stated that suitable action had been taken in the matter.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 24th May, 1912.—That a case of eggs forwarded on 12th February from Dummora, Co. Galway, to Manchester was not delivered to consignee.

The Department were informed that arrangements were made to meet a claim in respect of the case.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 24th May, 1912.—That on the arrival in Manchester of a half case of eggs forwarded on 26th February from Fethard, Co. Tipperary, 210 of the eggs were found to be broken.

A claim made by the consignee in respect of the loss was settled.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LANCASHIRE AND YORKSHIRE RAILWAY Co., 24th May, 1912.—That when a case of eggs forwarded from Fethard to Manchester on the 17th May it was found that 93 eggs were missing.

The Great Southern and Western Co. stated that the consignment passed all points into consignee's possession without remark, that on unpacking it was found that 95 eggs were missing and that a claim for 6s. 5d. in respect of the loss sustained was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; WATERFORD STEAM SHIP Co.; LONDON AND NORTH WESTERN RAILWAY Co.; 24th May, 1912.—That, on the delivery in Manchester on 24th May of 8 cases of eggs forwarded from Dungarvan it was found that 38 eggs were missing from one case and that 55 eggs were broken in another case, the sound eggs in the case being much reduced in value owing to leakage from the broken eggs.

A claim made in the matter was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT WESTERN RAILWAY Co., 27th May, 1912.—That a consignment of butter forwarded on 20th May from Charlville to Stratford-on-Avon had not been delivered up to 7 p.m. on the 24th May.

It appeared that delay occurred to the consignment while in the hands of the Great Western Co. owing to restriction of service consequent on the coal miners' strike.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 29th May, 1912.—That a consignment of eggs forwarded from Kilmallock Station on the 22nd May to Manchester had not been delivered to consignees up to the 29th May.

On inquiry it appeared that the eggs had been consigned, apparently in error, to another trader in Manchester, to whom they were delivered on the 25th May.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co.; 29th May, 1912.—That a consignment of eggs forwarded on the 25th May from Bagenalstown to Manchester was not delivered until the 29th May and that two of the cases were then found to be in a damaged condition.

The Great Southern Co. expressed regret that the consignment had been delayed for two days while in their possession and stated that they could not explain how the delay occurred but that suitable notice had been taken of the matter. The Department were informed that a claim made in respect of the damage was met.

LONDON AND NORTH WESTERN RAILWAY Co., 30th May, 1912.—That the time occupied in the transit of empty rabbit hampers sent from Manchester to Crusheen Station, Co. Clare, was never less than a fortnight, and that over a hundred hampers were sometimes outstanding.

The London and North Western Co. expressed regret that delays had taken place and hoped that the instructions which they had issued would prevent a recurrence.

LONDON AND NORTH WESTERN RAILWAY Co., 30th May, 1912.—That fish forwarded from Ireland via Holyhead to Manchester was delayed in delivery, consignments arriving up to 9 a.m. or 9.30 a.m., that they were then late for market, and had to be disposed of at a reduced price.

It was stated that in order to secure the best results delivery should be effected before 6 a.m.

The Company stated that usually the consignments were delivered between 7.30 a.m. and 8.30 a.m. and that special attention was being given to the service for the traffic. The question of having such arrangements made as would result in consignments reaching the market before 6 a.m. is receiving attention.

GREAT NORTHERN RAILWAY Co. (IRELAND); LONDON AND NORTH WESTERN RAILWAY Co., 30th May, 1912.—That in 2 cases of eggs forwarded from Castleblayney to Manchester and delivered on 29th May, 128 eggs were found to be broken.

It was not ascertained where the damage occurred.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 31st May, 1912.—That in a consignment of seven 6-hhd. cases of eggs received at Manchester on 7th September, 1911, from Charleville, 476 eggs were found to be broken and that the London and North Western Railway Co. had declined to meet a claim made in the matter as the eggs had been carried at owner's risk.

In view of the time that had elapsed since the passing of the consignment, and of the fact that the eggs had been carried at owner's risk the case did not appear to be one in which the Department could usefully intervene.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 5th June, 1912.—That butter sent from markets in West Clare to Cork and conveyed from Kilrush by the 5.30 p.m. train was not always forwarded from Ennis so as to reach Cork the following morning.

The Great Southern and Western Railway Co. stated that the butter was usually forwarded from Ennis by the mail train due to leave at 8.35 p.m. and that consignments received late for that train were conveyed by the next goods train. Complainant was informed of the Company's reply, and, in a letter dated the 4th July, stated that there was then no cause of complaint in regard to the matter.

MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE), 6th June, 1912.—That the 3.15 p.m. train from Moneymore was no longer available for the conveyance of consignments of soft fruit forwarded from Moneymore and that it was not practicable to have consignments ready for the 10.30 a.m. goods train, the only other train available for traffic intended for shipment.

The Midland Railway Co. (Northern Counties Committee) were, it appeared, prepared to attach to the 2.15 p.m. train from Moneymore, a van in which fruit could be loaded, the consignments to be transferred at Magherafelt to the 4.10 p.m. passenger train thence to Belfast.

GREAT NORTHERN RAILWAY CO. (IRELAND); AYR STEAM SHIPPING CO.; NORTH EASTERN RAILWAY CO., 8th June, 1912.—That on the delivery of 19 cases of eggs forwarded from Benburb, Co. Tyrone, to Newcastle-on-Tyne it was found that upwards of 180 eggs were missing.

It appeared that the eggs were delivered in apparently good condition and were signed for without remark.

BELFAST AND COUNTY DOWN RAILWAY CO.; GREAT NORTHERN RAILWAY CO. (IRELAND); GREAT SOUTHERN AND WESTERN RAILWAY CO., 12th June, 1912.—That a mare and foal, forwarded on the morning of the 7th June, from Comber to Ballyhale, did not reach their destination until the following evening.

It appeared that the animals reached Amiens Street Station, Dublin, at 2 p.m. on the date of forwarding, that they were then put to livery, no suitable merchandise service from Dublin to Ballyhale being available after that hour, and were forwarded from Kingsbridge Station, Dublin, at 12.20 p.m. on 8th of June, arriving at at Ballyhale at 6.32 p.m.

GREAT SOUTHERN AND WESTERN RAILWAY CO., AND OTHER COMPANIES, 13th and 14th June, 1912.—(1) That 84 live chickens forwarded in October, 1911, from Ballyragget to Hebdensbridge were not delivered, and that a claim for £7 14s. made in the matter had not been met. (2) That seven cases of eggs forwarded on the 8th August, 1911, from Ballyragget to Glasgow were very badly damaged in transit, and that a claim for £3 5s. made in respect of the damage had not been met.

(1) The claim made in respect of the chickens was settled. (2) The Great Southern and Western Co. stated that the consignment was carried at owner's risk and that the carrying companies were not prepared to admit liability in the matter.

LONDON AND NORTH WESTERN RAILWAY CO., 17th June, 1912.—That it was found on delivery of consignments of eggs received in Manchester on 17th June from Birr, Boyle, Fivemiletown, Longford, Manerhamilton, and Thurles, that eggs were missing and that breakages had occurred.

The London and North Western Railway Co., with whom the Department communicated in the matter, replied to the effect that they had not been able to ascertain how or where the damage occurred. The Company added that they would continue to keep a close watch on the traffic.

GREAT NORTHERN RAILWAY CO. (IRELAND), 18th June, 1912.—That butter handed in at Ballyhaise Railway Station after 12 o'clock (noon) would not be forwarded on the same day.

The Company arranged to convey by the passenger train leaving Ballyhaise at 8.22 p.m. any butter consigned via Dublin which it might not be found possible to forward by the goods train leaving at 12 noon.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LAIRD LINE, LTD. MIDLAND RAILWAY CO. OF ENGLAND; NORTH EASTERN RAILWAY CO. 21st June, 1912; 13th July, 1912.—That delay occurred in the conveyance of certain consignments of butter forwarded from Callan, Co. Kilkenny, to Blaydon, Blyth, Gateshead and Felling.

From inquiries made by the Department in the matter it appeared that, regarding some of the consignments, the delay was due to the Whitsuntide holidays. Arrangements were made whereby consignments for Gateshead and Felling would be forwarded via Carlisle so that advantage might be taken of direct wagons to Newcastle delivery being thereby secured in the ordinary course on the fourth day after despatch. It did not appear that a better service could be afforded. The whole subject of the transit to the Newcastle-on-Tyne district had, the Department understood, been carefully considered.

GREAT NORTHERN RAILWAY CO. (IRELAND), 28th June, 1912.—That bales of straw forwarded for the Dungannon Market, by a trader in Portadown, were found on arrival to be wet, and that egg boxes also forwarded for the market were received in a wet and dirty condition.

Action was taken by the Company to prevent a recurrence.

SUMMARY OF THE DEPARTMENT'S ACTION IN CONNECTION WITH COMPLAINTS AS TO CHARGES BY CARRYING COMPANIES IN RESPECT OF THE CONVEYANCE OF MERCHANDISE.

Complaints received during the period 1st July, 1911, to 30th June, 1912.

GREAT SOUTHERN AND WESTERN RAILWAY COMPANY, GREAT NORTHERN RAILWAY COMPANY (IRELAND), 6th July, 1911.—That charges of 3s. 6d. and 2s. 6d., respectively, had been made in respect of livery (at Dublin) and delivery of a mare sent from Ballyhale, County Kilkenny, to Banbridge.

It appeared that the animal had been forwarded from Ballyhale at 10.22 a.m. on the 30th June and arrived at Kingsbridge at 1.55 p.m., and was then put to livery, the recognised train for conveying horses from Amiens Street to Banbridge having left at 10.45 a.m. The Great Northern Railway Company were, it was understood, prepared to refund the delivery charge of 2s. 6d.

GREAT SOUTHERN AND WESTERN RAILWAY COMPANY, GREAT WESTERN RAILWAY COMPANY; AND LONDON AND SOUTH WESTERN RAILWAY COMPANY, 7th July, 1911.—That difficulty was being experienced in obtaining through rates for the conveyance of butter and cream from Newcastle West to Crewkerne.

Inquiries showed that through rates for the conveyance of the traffic per passenger train service had been put into operation. Complainants did not proceed with the question of the charges for the carriage of butter per goods train service.

GREAT SOUTHERN AND WESTERN RAILWAY CO., CITY OF DUBLIN STEAM PACKET CO., 14th July, 1911.—That a charge of 25s. had been made for removing, at North Wall, the wheels of a straw elevator or stacker sent from England to Athy.

It appeared that the elevator being found too high to pass under the bridges on the Great Southern and Western Railway, it became necessary to remove the wheels at Dublin, and the work was given to a contractor whose charge was 25s. This charge was subsequently reduced to 15s.

BELFAST AND COUNTY DOWN RAILWAY CO., 17th July, 1911.—That the charge—14s.—made for the conveyance of a boar from Saintfield; Co. Down, to Killagan, Co. Antrim, was excessive.

The charge was reduced to 6s. and the difference refunded.

GREAT NORTHERN RAILWAY CO. (IRELAND), 24th July, 1911.—That the charges for the conveyance of small quantities of farm produce from Killylea to Belfast were excessive—the charge, inclusive of delivery, in respect of 6 dozen of eggs being 1s.

Complainant was asked for particulars of any consignments in respect of which excessive charges were made, but such information was not supplied.

It appeared that the Company had in force a special scale of rates for the conveyance, by passenger train service, of farm and market garden produce in small consignments forwarded from any station on their line to Belfast, and other centres, and that in accordance with this scale, the charge for a consignment such as that mentioned would be 4d.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 24th July, 1911.—That a charge of 8s. 7d. had been made for the conveyance from Dublin to Clonakilty of two bundles of empty flax bales weighing 1 cwt. 0 qr. 8 lbs.—Inquiries were made in the matter and it was ascertained that the charge had been reduced and 4s. 10d. refunded to consignors.

DUBLIN AND SOUTH EASTERN RAILWAY Co. and other Companies, 27th July, 1911.—That the rates charged by the Irish Railway Companies for the conveyance of cordials were excessive.

The Department communicated with the Companies concerned, and the question was considered at a meeting of the Irish Railway Managers. The Managers decided that no change could be made in the Classification regarding cordials.

GREAT SOUTHERN AND WESTERN RAILWAY Co. AND OTHER COMPANIES. 31st July, 1911.—That the rate—5s. 10d. per cwt.—for the conveyance of cream from Charleville to Crewe, Dacre, Hull and Stalbridge, was excessive.

Rates of 4s., 5s. 3d., 5s. 3d., and 5s. per cwt., respectively, minimum 1 cwt., were issued for the conveyance of the cream (Owner's Risk).

GREAT SOUTHERN AND WESTERN RAILWAY Co., 1st August, 1911.—That a charge of 2s. had been made for the conveyance by passenger train of a box of apples, weighing about 2½ stone, from Kildare to Dalkey, and a charge of 1s. 8d. for the carriage of a box of gooseberries of similar size between the same places.

On inquiry it appeared that in the case of the charge for the conveyance of the box of apples a mistake had been made. The sum of 8d. was refunded. It appeared that the charge for the gooseberries was at the ordinary parcels rate. Had the box been consigned at Owner's Risk the charge would have been 10d.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 10th August, 1911.—That the rate for the conveyance of crab apples from Bagenalstown to Dublin was excessive.

A rate of 10s. 8d. per ton was fixed for the traffic. The former rate was 13s. 4d. per ton.

GREAT NORTHERN RAILWAY COMPANY (IRELAND), 10th August, 1911.—That a charge of 8s. had been made for the livery and loading (at Dublin) of a mare and foal sent from Thomastown, Co. Kilkenny, to Banbridge.

It appeared that the animals were sent from Thomastown by the 10.21 a.m. train, and as the Great Northern Railway Company only forwarded such traffic by the 10.45 a.m. passenger train from Amiens Street the animals had to be kept in Dublin overnight and the charge for livery (4s.) could not have been avoided. The Company were prepared to refund the difference (4s.) between this amount and the charge actually made.

GREAT SOUTHERN AND WESTERN RAILWAY Co., CLYDE SHIPPING Co. 12th August, 1911.—That the rate—20s. 10d. per ton—for the conveyance of crab apples from Cahir to Belfast via Waterford and Clyde Shipping Co. was high when compared with the charge, 17s. per ton, for consignments sent from Clonmel, Tipperary, and Kilkenny to Belfast by the same route.

A rate of 19s. 1d. per ton (via Waterford), station to station, was fixed for the conveyance of crab apples in 2-ton lots from Cahir to Belfast.

As regards the rates for the traffic from Clonmel, Tipperary and Kilkenny, the lower rate from Clonmel was, it appeared, due to the water service (River Suir) between that town and Waterford, and the distances from Tipperary and Kilkenny to Belfast via Dublin were less than the distance from Cahir.

GREAT SOUTHERN AND WESTERN RAILWAY Co. AND OTHER COMPANIES. 16th August, 1911.—That a through rate was not in operation for the conveyance of cream from Charleville to Guildford, Surrey.

Rates of 4s. 9d. per cwt., minimum 1 cwt., and 4s. 3d. per cwt., minimum 10 cwt., at Owner's Risk, were issued for the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 16th August, 1911.—(1) That the charges—3s. 9d. per ton in 6 ton lots, and 5s. per ton in lots of less than 6 tons—for the conveyance of corn from Ballycullane to Wexford were excessive; (2) that persons forwarding consignments of

corn were not on all such occasions allowed to travel by rail to Wexford at reduced fares, and (3) that cheap market tickets should be issued bi-weekly (instead of weekly) from Ballycullane to Wexford.

(1) The Company were not prepared to reduce the rates. They stated that the rate for corn in 6 ton lots had already been reduced 6d. below their usual charge for the distance. (2) The Company were not prepared to make the concession. The cost of a cheap market ticket would be 2s. 3d., and the return fare in force was 3s. 6d., (3) The Company stated that they considered it sufficient to issue cheap tickets from Ballycullane to Wexford on one day in the week. Wexford was not the market town for Ballycullane for ordinary purposes. Waterford was only 13½ miles distant (Wexford was 24), and cheap fares to Waterford were issued on two days of the week.

DUBLIN AND SOUTH EASTERN RAILWAY CO., GREAT SOUTHERN AND WESTERN RAILWAY CO., 24th August, 1911.—That the rate, amounting to about 3s. 6d. per cwt. on the gross weight, charged for the conveyance of blackberries by passenger train from New Ross to Cork was excessive.

A rate of 2s. per cwt. was fixed for the conveyance of the traffic at Owner's Risk per passenger train between the places mentioned, and the charges in respect of the consignments which had passed were reduced. It appeared that the former rate was of a penny per lb.

GREAT SOUTHERN AND WESTERN RAILWAY CO., CITY OF CORK STEAM PACKET CO., 11th September, 1911.—That through rates were not in force for the conveyance of live poultry from Newmarket, Co. Cork, to Plymouth and Devonport *via* Cork.

It does not appear that through rates have so far been arranged.

GREAT SOUTHERN AND WESTERN RAILWAY CO., GREAT WESTERN RAILWAY CO., 19th September, 1911.—That the rate—3d. per gallon—for the conveyance of milk from Charleville to London was excessive.

On inquiry it was found that a rate of 2½d. per gallon had been put in operation for the traffic.

LONDON AND NORTH WESTERN RAILWAY CO., 5th October, 1911.—That the rate—21s. 3d. per ton—for the conveyance of seed potatoes from Dublin to Macclesfield was excessive.

The Company were, it appeared, prepared to fix a reduced rate for 4 ton lots.

SOUTH EASTERN AND CHATHAM RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., 11th October, 1911.—That the charge—£5 10s. 6d.—for the conveyance of a cow from Adisham, Canterbury, to Dublin was excessive.

It appeared that the cow was forwarded by passenger train to Holyhead and that the charge, which included 10s. for feeding at Holyhead, was in accordance with the scale for such service. As, however, the cow was sent from Adisham on the 20th May, and did not reach Dublin until the 26th May, the Companies made a refund of £1 13s. 6d.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 22nd October, 1911.—That a charge of 7s. 6d. was made for the conveyance of 2 crates and 1 barrel of apples from Dublin to Ballycar, Co. Clare.

It appeared that the complainant, who was returning with the apples from a Fruit Show held at Ballsbridge, did not produce a certificate signed by the Secretary of the Show, and that consequently the traffic was charged for in the ordinary way. The amount was refunded.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 1st November, 1911.—That there was no through rate in operation for the conveyance of eggs from Tipperary to Barrow-in-Furness.

Through rates of 48s. 4d. per ton, Owner's Risk, and 57s. 11d. per ton, Company's Risk, were arranged for the traffic.

DUBLIN AND SOUTH EASTERN RAILWAY CO., 6th November, 1911.—That a rate of 4s. 10d. per ton had been charged for the conveyance of a consignment of 3 tons of lime from Wexford to Ferns.

It appeared that the consignment had been charged for at the rate applying—Class C rate. The rate for the traffic between the places in lots of 6 tons was 2s. 6d. per ton.

GREAT NORTHERN RAILWAY CO. (IRELAND), MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 14th November, 1911.—That charges amounting to 23s. had been made for the conveyance from Cookstown, Co. Tyrone, to Hollymount, Co. Mayo, of two boxes of live fowl weighing, respectively, 56 lbs. and 126 lbs.

The Department had inquiry made in the matter, and instructions for a refund of 8s. 4d. were given by the Midland Great Western Railway Co.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 28th November, 1911.—That the rate (38s. 4d. per ton) charged for the conveyance of fruit pulps from Dungarvan to Leeds was excessive.

The Company stated that the rate, which was an exceptionally reduced one, was considered reasonable for the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES. 6th December, 1911.—That the charges made for the conveyance of a consignment of butter sent from Charleville to Aberdeen by goods train service were excessive.

Complainants were asked to furnish particulars as to the forwarding of the consignment. The information was not received.

GREAT NORTHERN RAILWAY CO. (IRELAND), 6th December, 1911.—That a demurrage charge of £13 1s. was being made in respect of delay in unloading wagons containing maize at Portadown station.

It appeared on inquiry that the Company were not prepared to forego the charge as the wagons had been required when the delay took place.

GREAT NORTHERN RAILWAY CO. (IRELAND), 7th December, 1911.—(1.) That the rates for the conveyance of potatoes from Annaghmore Armagh, Richhill and Dungannon to Belfast were excessive. (2.) That the rates for the conveyance of apples from the Loughgall district (Co. Armagh) to Belfast and to Dublin were excessive.

(1.) The Company were not prepared to reduce the rates.

(2.) The Company stated that the rate for apples in any quantity from Annaghmore and Richhill to Belfast—8s. 2d. per ton, including cartage at Belfast—was a low one, being only 6d. per ton in excess of the rate from Portadown, and that there was a special rate from Annaghmore, Richhill and Portadown to Dublin of 15s. per ton, including cartage in Dublin, for lots of not less than 1 ton. The Company were not, it appeared, prepared to make reductions in these rates.

(1.) COUNTY DONEGAL RAILWAYS JOINT COMMITTEE, MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE), 7th December, 1911.—That the charge—5s. 4d.—made for the conveyance of a returned empty pig crate from Killybegs to Lerne was excessive.

(2.) GREAT SOUTHERN AND WESTERN RAILWAY CO., 9th December, 1911.—That the charge—6s. 5d.—made for the conveyance of a returned empty pig crate from Cahirciveen to Fiddown was excessive.

(1) and (2.) It appeared that the question of the charges for returned empties had been considered by the Irish Railway Companies, but that the Companies were not prepared to put reduced rates into operation.

DUBLIN AND SOUTH EASTERN RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., 12th December, 1911.—That the charges for the conveyance of a consignment of holly from Rathdrum to Nottingham were excessive.

The Department communicated in the matter with the Dublin and South Eastern Railway Co., who were unable to trace an entry to correspond with the particulars given by complainant.

A consignment of holly passed shortly before the date of the complaint, and in regard to this consignment the Companies were not, it appeared, prepared to reduce the charges made.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 13th December, 1911.—That the rate—56s. 8d.—per ton for the conveyance of cheese from Ballyhaize to Cardiff was excessive.

It appeared that the rate applied *via* Dublin, Belfast, Dundalk or Greenore. The question of reducing the rate was considered by the Companies concerned who, the Department understood, were not prepared to make any reduction.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 13th December, 1911.—That refunds amounting to £12 4s. 10d., claimed in respect of consignments of cream forwarded by complainants from Charleville to Guildford, during the period from June to October—application having being made in June for the issue of a through rate which was put into operation on the 1st October—had not been made.

The question has, it appears, not so far been settled.

GREAT NORTHERN RAILWAY CO. (IRELAND), 14th December, 1911.—That the charges made by the Great Northern Company, for the conveyance of cattle by passenger train, were 30 per cent. over the charges applying by merchandise train.

The Department had inquiries made in the matter. There was no obligation on a railway company to convey cattle by passenger train or other similar service. The charges applying to the conveyance of cattle by passenger train service over certain lines in Ireland were, it appeared, 30 per cent. over the charges for the conveyance of the traffic by merchandise train.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 15th December, 1911.—That the rate—2s. 6d. per cwt., Owner's Risk—for the conveyance of oysters from Fenit to Dublin was excessive.

The Department brought the matter under the notice of the Company, who, however, were not prepared to reduce the rate.

GREAT NORTHERN RAILWAY CO. (IRELAND), 19th December, 1911, 20th December, 1911.—That the rates charged by the Great Northern Railway Co. for the conveyance of goods from Belfast to Armagh were high when compared with the charges to Monaghan and Portadown.

The matter is receiving attention.

GREAT SOUTHERN AND WESTERN RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 29th December, 1911.—That consignments of dead poultry sent to Blackburn from Tuam and Ballymoe respectively, were conveyed by passenger train service despite instructions having been given to convey them by goods train service and that the charges were increased accordingly.

It appeared that in the case of Tuam the consignor, not being satisfied that the consignment would be carried by goods train service with sufficient expedition, forwarded it by passenger train.

As regards the consignment from Ballymoe it appeared that the Midland Great Western Company's official, who was despatching the traffic, thought that the consignment was consigned by goods train service in error, as it was unusual to forward dead poultry by such service. He accordingly had it despatched by passenger train. The Department understood that instructions had been issued to reduce the charge to the goods rate.

GREAT NORTHERN RAILWAY CO. (IRELAND), GREAT SOUTHERN AND WESTERN RAILWAY CO., 9th January, 1912.—That the rate—29s. 8d.—

per ton, for the conveyance of butter from Ballyhaise to Limerick was excessive.

The Company regretted that no reduction could be made in the rate.

GREAT SOUTHERN AND WESTERN RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., 16th January, 1912.—That the rate—5s. 10d.—per cwt., Owner's Risk—for the conveyance of dead meat from Tullamore to London was excessive.

A rate of 5s. per cwt., Owner's Risk, minimum 1 cwt., was fixed for the conveyance of the traffic (passenger train service).

NORTH BRITISH RAILWAY CO., DUBLIN, SILLOTH AND ISLE OF MAN STEAMERS, 31st January, 1912.—That charges amounting to £3 ls. had been made for the conveyance of a bull from Killearn (Scotland) *via* Silloth to Dublin.

It appeared on inquiry that if the bull had been conveyed from Killearn *via* Glasgow instead of *via* Silloth the total charges would have been about 18s. 7d. The animal had, however, been consigned *via* Silloth. A refund of 16s. 9d. was made representing a reduction of one-third in the charge for conveyance from Killearn to Silloth.

GREAT NORTHERN RAILWAY CO. (IRELAND), 6th February, 1912.—That charges of 6s. 8d. and £1 3s. 10d., respectively, were made for the conveyance of a barrel of fresh herrings and 6 barrels of salt herrings, forwarded from Kilkeel to Bailieboro'.

Complainant was asked by the Department to give the dates of despatch. The information was not received.

The Department are however having inquiry made in the matter.

GREAT SOUTHERN AND WESTERN RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., CALEDONIAN RAILWAY CO., 6th February, 1912.—That the charge made for the conveyance from Charleville to Aberdeen of a consignment of 26 boxes of butter was excessive.

It appeared that when the butter was being consigned the consignors were informed by the Great Southern and Western Company's agent that the Glasgow route was closed (railway employees' strike) and that the butter would not be accepted unless it were booked locally to Dublin or one of the English ports. The butter was then consigned *via* Holyhead and the accumulated charges *via* Holyhead and Carlisle were at the rate of 96s. 8d. per ton. It appeared that the Companies were prepared, as a special case, to reduce the charge to 62s. 6d. per ton.

(1) GREAT SOUTHERN AND WESTERN RAILWAY CO., (2) CORK, BANDON AND SOUTH COAST RAILWAY CO., GREAT SOUTHERN AND WESTERN RAILWAY CO., 6th February, 1912.—(1) That the Company's Risk rate (1s. 3d. per cwt.) had been charged instead of the Owner's Risk rate (1s. per cwt.) for the conveyance of 6 cwt. of herrings sent from Waterford to Cahir. (2) That a charge of 5s. 5d. had been made for the conveyance from Bantry to Cahir of two half-boxes of herrings (weighing about two cwt.).

(1) It appeared on inquiry that no Owner's Risk consignment note had been tendered in respect of the consignment. (2) It was arranged to apply the Great Southern and Western Company's local scale of charges (Owner's Risk), for the conveyance by passenger train of fish and other perishable traffic. The charge would be 2s. 2d. per cwt. A refund was made in respect of the consignment.

DUBLIN AND SOUTH EASTERN RAILWAY CO., GREAT WESTERN RAILWAY CO., 8th February, 1912.—That the rate—75s. per ton—for the conveyance of dead meat from Enniscorthy to London, was excessive.

The Department were informed that the following rates, to remain in

operation till the end of 1912, were put in force for the conveyance of dead meat by goods train service from Enniscorthy to London:—

60s. per ton in 3 ton lots	..}	Owner's Risk, delivered in London.
65s. " " 1	..}	
75s. " in lots under 1 ton	..}	

It appeared that the rates were applicable either *via* Rosslare and Fishguard or *via* Dublin and Holyhead.

GREAT WESTERN RAILWAY CO., 8th February, 1912.—That a charge of 10s. 3d. had been made for the conveyance of a box of fish weighing 1 cwt. 3 qrs. from Milford Haven to Carlrow.

The Department suggested that the complainant should communicate in the matter with the Great Western Railway Co.

(1) MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, (2) GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 8th February, 1912.—(1) That the rate—73s. 4d. per ton—for the conveyance of eggs at Company's Risk from Foxford to Blackburn was excessive; (2) That charges of 16s. 11d. and 12s. 2d. had been made for the conveyance from Tuam to Lymington of hampers of dead poultry weighing, respectively, 297 lbs. and 203 lbs.

(1) Rates of 63s. 4d. per ton *via* Dublin, and 57s. 1d. per ton *via* Westport or Sligo, were arranged for the conveyance of the eggs in boxes, cases or crates, Ordinary Risk, carted in England. (2) A rate of 4s. 9d. per cwt. was issued for the traffic by passenger train service, Owner's Risk, minimum as for 1 cwt.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., LONDON AND NORTH WESTERN RAILWAY CO., 10th February, 1912.—That a charge of £2 10s. 5d. was made for the conveyance of a consignment of escallops weighing about 9 cwt. from Recross to London.

It appeared that the charge was based on the rate, 5s. 10d. per cwt. The rate was reduced to 3s. 9d. per cwt., and it was agreed to make refunds accordingly on lots that had been forwarded at the higher rate.

GREAT NORTHERN RAILWAY CO. (IRELAND), 13th February, 1912.—That the rate for the conveyance of steam-pressed hay from Strabane to Bristol *via* Belfast was 28s. 8d. per ton, whilst the rate from Londonderry—12 miles further from Belfast by—the same route was 18s. 4d. per ton.

The Company stated that the rate from Strabane to Bristol was 21s. 8d. per ton. It appeared that the rate from Londonderry had been struck to meet sea competition.

GLASGOW AND SOUTH WESTERN RAILWAY CO., AND OTHER COMPANIES, 17th February, 1912.—That a charge of £5 19s. 10d. was made for the conveyance of 3 tons of potatoes from Prestwick, Ayrshire, to Clonakilty.

It appeared on inquiry that the consignment had been carried from Glasgow *via* Belfast and the Great Northern and Great Southern and Western Railway Companies' lines, and that the charges were such as might be made for conveyance by that route. Had the consignment been forwarded from Glasgow, either *via* Dublin or by direct sea to Cork the charges would have been considerably less.

LONDONDERRY AND LOUGH SWILLY RAILWAY CO. AND OTHER COMPANIES, 22nd February, 1912.—(1) That the rate—10d. per barrel—charged for the conveyance of cured herrings from Buncrana to Londonderry, a distance of 12 miles, was excessive.

(2) That the charges for the conveyance of fresh fish from Buncrana to London were excessive.

(3) That the charge—12s. per ton—for the conveyance of empty fish barrels sent from Londonderry to Buncrana was excessive.

(1) The question of a reduced rate for the traffic has not been settled.

(2) The Londonderry and Lough Swilly Co. stated that they had communicated in the matter with the other interested companies. The question of reducing the rate has not yet been determined.

(3) The Londonderry and Lough Swilly Co. considered the charge reasonable in view of the small number of barrels that could be put in a wagon and of the handling and cartage necessary. The Company added that the numbers of barrels allowed to the ton were :—100 carrier barrels, 60 whole barrels, or 120 half barrels.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 22nd February, 1912.—That consignee had been charged 1s. in respect of the conveyance of a consignment of 100 oysters which had been forwarded "carriage paid" from Oranmore to Dublin.

It appeared on inquiry that a clerical error had occurred in making out the way-bill at Oranmore. A refund of 9d. was made to the consignee.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 24th February, 1912.—That goods train rates were not in operation for the conveyance of eggs from Killybeg Junction to Dublin.

The Company stated that there was no accommodation for goods traffic at the Junction.

GREAT SOUTHERN AND WESTERN RAILWAY Co. 27th February, 1912.—That a charge of £1 12s. 11d. had been made for the conveyance of 78 live turkeys from Cashel to Clonmel.

The Company stated that they considered that they were justified in charging the full truck rate whenever, for the convenience of traders, passenger train wagons had to be provided as a special case for the conveyance of turkeys other than in crates or boxes.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., LONDON AND NORTH WESTERN RAILWAY Co., 8th March, 1912.—That a charge of 3s. 5d. had been made for the conveyance of a 56-lb. box of butter which had been consigned by goods train service from Killeshandra to Blackpool.

It appeared that the butter reached Blackpool by passenger train, unentered. Delivery not being accepted by the consignee the question of the charge was looked into and the butter was, it was understood, delivered on the following day, the proper charge—1s. 10d.—being made.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 16th March, 1912.—That a charge of 4s. 6d. had been made for the conveyance of 2 cwt. of butter per goods train service from Killeshandra to Dublin.

The Department had inquiry made in the matter, and were informed that the Railway Company had arranged to make a refund. It was understood that the butter was carried by passenger train, although consigned by goods train.

GREAT SOUTHERN AND WESTERN RAILWAY Co. AND OTHER COMPANIES, 19th March, 1912.—That through rates were not in operation from Magensy Station to places in Great Britain other than Liverpool.

Through goods rates from Magensy Station to English stations generally were issued.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co. AND OTHER COMPANIES, 21st March, 1912.—That the rate—88s. 2d. per ton—charged for the conveyance of eggs at Company's Risk, from Castlereagh to London was excessive.

The following rates were arranged :—

Eggs in boxes, cases or crates, per ton—

80s. *via* Dublin, Company's Risk, carted in England.

73s. 1d., *via* Sligo, " " "

GREAT NORTHERN RAILWAY Co. (IRELAND), 21st March, 1912.—That a charge of 15s. had been made for the conveyance of 1 ton of oats from Belfast to Cookstown.

It appeared that the oats had been forwarded from Ayr to Cookstown, carriage paid to Belfast, and had been charged for at the rate of 20s. 10d. instead of 16s. 8d. per ton. A refund of 4s. 2d. was made.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 1st April, 1912.—That a charge of £1 16s. 10d. had been made for the conveyance of a pig in a crate (total weight 5 cwt.) from Worsley, near Manchester, to Cloughjordan.

It appeared on inquiry that the pig had been consigned from Worsley to Birr, not to Cloughjordan, and that the charge should have been £1 10s. 11d. Instructions were issued by the Company for a refund of 4s. 11d. to the consignee.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 10th April, 1912.—That a charge of 3s. 10d. had been made for the conveyance from Kildare to Kingsbridge, Dublin, of two cases of eggs, weighing less than 3 cwt.

The Department had inquiry made in the matter and were informed that the weight of the consignment was entered as 4 cwt. and that the actual charge made by the Railway Company and collected from the consignees was 2s. 5d., not 3s. 10d.

GREAT SOUTHERN AND WESTERN RAILWAY Co., GREAT WESTERN RAILWAY Co., 12th April, 1912.—That the rate—60s. per ton—charged for the conveyance of dead meat from Wexford to London *via* Rosslare and Fishguard was excessive.

The question of a reduction in the rate has not, the Department understand, so far been determined.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 18th April, 1912.—That the rate—13s. per ton—for the conveyance of linseed cake and meal from Dublin to Castlereagh was excessive.

It appeared on inquiry that the rates in force for the conveyance of linseed cake and other feeding stuffs between the places were as follows:—

9s. 4d.	per ton in 6 ton loads.
11s. 8d.	“ 2 “
13s. 0d.	“ lots under 2 tons.

and that there was no likelihood of a reduction.

(1) GREAT SOUTHERN AND WESTERN RAILWAY Co. AND OTHER COMPANIES; (2) DUBLIN AND SOUTH EASTERN RAILWAY Co. AND OTHER COMPANIES, 20th April, 1912.—(1) That through rates for the conveyance of eggs were not in operation between Turtaree, Co. Limerick, and Glasgow. (2) That through rates for the conveyance of eggs were not in operation between Tinahely, Co. Wicklow, and Glasgow.

(1) It appeared on inquiry that through rates were in operation for the conveyance of eggs from Foynes—the railway station for Turtaree—to Glasgow.

(2) The Department communicated with the Dublin and South Eastern Railway Co. in the matter, and a through rate of 32s. 11d. per ton was fixed for the traffic at Owner's Risk, in boxes, cases, crates or hampers.

GREAT SOUTHERN AND WESTERN RAILWAY Co. CITY OF DUBLIN STEAM PACKET Co., 20th April, 1912.—That charges amounting to £1 5s. 2d. had been made for the conveyance of 20 boxes of butter sent on the 15th April from Mitchelstown *via* Dublin, and thence per City of Dublin Steam Packet Co. to Belfast.

A refund of 6s. 2d. was made.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 7th May, 1912.—That in the case of a mare and foal which had been forwarded in March,

1191, from Waterford to Cashel at single rate plus 10 per cent. for the double journey, the animals to be returned to Waterford not later than the 31st August following, the Company claimed payment in respect of the return journey as the animals were not sent back until October.

The Company did not insist on payment of the claim.

CITY OF CORK STEAM PACKET CO., 18th May, 1912.—That Company's Risk rates for the conveyance of eggs, poultry, etc., by the Company's steamers were not in operation.

It appeared that the Company were not prepared to issue for the traffic rates at Company's Risk.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 29th May, 1912.—That for the conveyance of 38 firkins of butter forwarded on the 17th May from Listowel to Tipperary the Company charged as for 1 ton 9 cwt. 0 qrs. 2 lbs., instead of regarding 27 firkins as a ton—the standard in force prior to the passing of the Great Southern and Western and Waterford, Limerick, and Western Railway Companies Amalgamation Act, 1900. The Department were advised that the Company were entitled to charge in respect of actual weight.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 21st May, 1912.—That the rate—75s. 5d. per ton—for the conveyance of eggs at Company's Risk from Clifden to Manchester was excessive.

A rate, Company's Risk, of 70s. 10d. per ton for the eggs in boxes, cases or crates, carted in England, was arranged.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 21st May, 1912.—That the Company's Risk rate—73s. 4d. per ton—for the conveyance of eggs from Foxford to Manchester was excessive.

The following rates were fixed for the traffic :—

	<i>via</i> DUBLIN.	<i>via</i> SLIGO OR WESTPORT.
In boxes, cases or crates at Company's Risk, carted in England.	} 56s. 8d. per ton.	50s. 10d. per ton.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 21st May, 1912.—That the rates charged for the conveyance of eggs from Loughrea to Manchester were excessive.

It appeared on inquiry that the rates in operation for the traffic were :—

53s. 6d. per ton, Owner's Risk,
62s. 6d. per ton, Company's Risk,

and that there was no likelihood of reductions being effected.

GREAT SOUTHERN AND WESTERN RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 21st May, 1912.—That the rate—57s. 6d. per ton—for the conveyance of eggs from Gort to Manchester was excessive when compared with the rate—50s. per ton—from Claremorris to Manchester.

It appeared that the Owner's Risk rates from Gort and Claremorris were the same, i.e., 50s. per ton, the Company's Risk rate from Gort being 57s. 6d.

GREAT SOUTHERN AND WESTERN RAILWAY COMPANY, 21st May, 1912.—That the rate—50s. per ton—for the conveyance of eggs from Thurles to Manchester was high when compared with the rate—43s. 4d. per ton—from Midleton, Co. Cork, to Manchester.

It appeared that the rates in force for the traffic were as follows :—

	OWNER'S RISK	COMPANY'S RISK
	PER TON	PER TON
From Midleton to Manchester via Dublin ..	43s. 4d.	50s. 0d.
" " Cork ..	40s. 0d.	45s. 10d.
From Thurles " " ..	46s. 0d.	50s. 10d.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 22nd May, 1912.—That the rates for the conveyance of eggs from Longford to Manchester were excessive when compared with those from Ballaghaderreen, Sligo and Cork.

It appeared that the following rates were in operation for the traffic:—

		COMPANY'S RISK PER TON.		OWNER'S RISK PER TON.	
		s.	d.	s.	d.
To Manchester from	Ballaghaderreen	..	57 6	50	0
"	" Longford	..	51 8	50	0
"	" Sligo	..	50 0	45	0
"	" Cork via Dublin	..	45 10	38	4
"	" " Steamer	..	41 8	35	0

The rates (rail in Ireland) between Sligo and Manchester and Cork and Manchester were governed by sea competition. It did not seem that there was any likelihood of a reduction in the Longford figures.

LONDON AND NORTH WESTERN RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 24th May, 1912.—That the charge—£4 2s.—made for the conveyance of a bull forwarded from Leintwardine (Hopton Heath Station), Herefordshire, to Carrick-on-Shannon was excessive.

It appeared on inquiry that the bull had been specially consigned by passenger train service, but that an overcharge of 6s. 8d. had been made. This amount was refunded.

GREAT NORTHERN RAILWAY CO. (IRELAND), MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 28th May, 1912.—That there was no through rate for the conveyance of fish boxes from Londonderry to Achill.

A through rate of 18s. per ton was issued for new fish empties from Londonderry to Achill with a minimum of 1 ton per consignment.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 28th May, 1912.—That while only 1s. 3d. was charged for the conveyance of 4½ cwt. of fruit from Liverpool to Dublin, a charge of 5s. 3d. was made for the conveyance of the consignment between Dublin and Castletown.

It appeared that the consignment weighed 4 cwt. 3 qrs. and that the charge—including 1s. 3d. for cartage and dues paid out at Liverpool—from Liverpool to Castletown should be 6s. 10d.—the rate from Liverpool to Castletown being 23s. 4d. per ton. The amount collected for conveyance was 6s. 6d.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 29th May, 1912.—That a charge of 5s. 3d. had been made for the conveyance from Kingsbridge to Limerick of two boxes containing 4 dozen tomato plants.

It appeared on inquiry that the charge applicable to the boxes was the full parcels rate. If the boxes had been consigned at Owner's Risk, the total charge would have been 2s. 9d.

LONDON AND NORTH WESTERN RAILWAY CO., GREAT NORTHERN RAIL-

WAY CO. (IRELAND), LONDONDERRY AND LOUGH SWILLY RAILWAY CO., 30th May, 1912.—That through rates were not in operation for the conveyance of returned empty fish boxes forwarded from Manchester to stations on the Londonderry and Lough Swilly Railway Company's line.

The Londonderry and Lough Swilly Co. stated that through rates for fish empties were in operation between several English centres—including Manchester—and Buncrana. The question of through rates between Manchester and other stations on the Londonderry and Lough Swilly line has, it appears, not yet been determined.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 4th June, 1912.—That the rates charged for the conveyance of apples to Birmingham from Richhill, Annaghmore, Vernersbridge, Armagh, Lurgan, (32s. 11d. per ton), Portadown (32s. 1d. per ton), Crumlin (30s. 10d. per ton), Monaghan and Newtownbutler (35s. per ton), and to London from Lurgan, Richhill, Annaghmore, Vernersbridge, Armagh and Portadown (37s. 6d. per ton) were excessive.

The Department were informed by the Great Northern Co. that the question of reducing the rates was brought before a Conference of English Railway Companies, but that it was considered that the rates, which were "exceptional," were reasonable and that further reductions could not be made.

GREAT SOUTHERN AND WESTERN RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., and NORTH STAFFORDSHIRE RAILWAY CO., 17th June, 1912.—That a through rate was not in operation for the conveyance of cream from Charleville to Sudbury.

A rate of 4s. 9d. per cwt., minimum 1 cwt. (passenger train service) was issued for the traffic at Owner's Risk.

GREAT NORTHERN RAILWAY CO. (IRELAND), 20th June, 1912.—That the rate—11s. per ton—for the conveyance of maize from Belfast to Ballyhaise was excessive.

It appeared that there was no likelihood of a reduction in the rate. The following rates were also in force for the traffic:—

6	"	7s. 6d.	"	"	"
5	"	9s. 2d.	"	"	"

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 22nd June, 1912.—That £1 11s. 10d. per ton was charged for the conveyance of sulphate of copper from Dublin to Belmullet.

It appeared that there was no likelihood of the rate being reduced.

SALE OF FOOD AND

I.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,
ACTS IN THE COUNTIES

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken	No. of Prosecutions.
				£ s. d.		
Antrim, . . .	85	—	—	—	—	—
Armagh, . . .	132	1	—	—	5	—
Carlow, . . .	124	—	—	—	4	—
Cavan, . . .	125	2	2	1 1 6	1	—
Clare, . . .	170	1	1	0 15 6	—	—
Cork, . . .	667	107	103	67 17 10	3	—
Donegal, . . .	142	—	—	—	3	—
Down, . . .	93	1	1	0 17 6	7	—
Dublin, . . .	201	1	1	5 0 0	10	1
Fermanagh, . . .	53	—	—	—	—	—
Galway, . . .	167	5	4	2 18 0	10	5
Kerry, . . .	283	29	24	12 13 5	—	—
Kildare, . . .	87	—	—	—	9	—
Kilkenny, . . .	68	—	—	—	—	—
King's, . . .	94	2	2	0 5 0	5	—
Leitrim, . . .	79	—	—	—	—	—
Limerick, . . .	246	2	2	0 13 1	3	—
Londonderry, . . .	59	—	—	—	1	—
Longford, . . .	22	—	—	—	—	—
Louth, . . .	64	—	—	—	—	—
Mayo, . . .	191	3	3	2 1 0	8	—
Meath, . . .	80	—	—	—	1	—
Monaghan, . . .	29	—	—	—	1	—
Queen's, . . .	86	1	1	0 2 0	—	—
Roscommon, . . .	61	—	—	—	—	—
Sligo, . . .	32	—	—	—	—	—
Tipperary	136	—	—	—	—	—
(N.R.),						
Tipperary	100	2	1	0 19 4	3	1
(S.R.),						
Tyrone, . . .	118	1	1	0 9 6	1	—
Waterford, . . .	144	5	5	0 15 0	—	—
Westmeath, . . .	134	—	—	—	2	—
Wexford, . . .	70	1	1	0 12 6	—	—
Wicklow, . . .	100	—	—	—	3	—
Total, . . .	4,242	164	152	97 1 2	80	7
Total for Year 1910, . . .	3,869	98	91	55 12 9	55	2

One sample of Margarine-Cheese was taken in Co. Antrim during the period. There was no infringement of the Acts in regard to the sample.

DRUGS ACTS, 1875 to 1899.

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER THE
DURING THE YEAR 1911.

		Cheese.	Milk.			
No. of Convic- tions	Penalties imposed	No. of Samples taken.	No. of Samples taken.	No. of Prosecu- tions.	No. of Convic- tions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	36	148	20	9	4 10 0
—	—	18	80	13	11	16 11 6
—	—	16	78	2	2	3 18 0
—	—	20	86	6	6	2 12 2
—	—	4	142	1	1	0 2 6
—	—	5	528	11	11	9 6 9
—	—	55	97	8	7	2 18 0
—	—	83	116	—	—	—
1	0 11 6	15	981	25	22	71 14 0
—	—	3	17	—	—	—
4	4 15 0	15	259	10	8	12 6 0
—	—	7	169	4	3	1 3 0
—	—	15	66	4	4	4 3 0
—	—	1	57	—	—	—
—	—	22	51	1	—	—
—	—	20	52	1	—	—
—	—	7	397	7	7	2 8 8
—	—	16	15	2	1	0 1 0
—	—	10	35	6	6	2 0 6
—	—	1	41	2	2	2 16 6
—	—	14	208	—	—	—
—	—	33	45	3	3	3 14 6
—	—	2	38	1	1	0 2 6
—	—	8	53	—	—	—
—	—	1	151	7	7	7 19 10
—	—	4	32	—	—	—
—	—	5	148	1	1	0 12 7
1	0 2 6	6	300	11	9	8 19 2
—	—	56	114	8	7	6 6 6
—	—	2	106	3	2	0 3 6
—	—	38	235	4	4	3 2 7
—	—	1	46	1	1	1 14 0
—	—	20	57	—	—	—
6	5 9 0	559*	4,948	162	135	169 6 9
2	2 3 1	528†	4,721	208	167	179 16 10

* Proceedings in one case in Co. Antrim. Case was dismissed.

† No Proceedings were instituted in respect of any of these samples.

**II.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,
THE ACTS IN THE COUNTIES DURING**

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
				£ s. d.		
Antrim, .	32	—	—	—	3	—
Armagh, .	72	—	—	—	3	—
Carlow, .	35	1	1	0 17 6	2	—
Cavan, .	53	—	—	—	1	—
Clare, .	107	1	1	0 15 6	2	—
Cork, .	398	5	5	4 0 11	4	—
Donegal, .	44	—	—	—	2	—
Down, .	58	1	1	0 2 6	7	—
Dublin, .	101	—	—	—	7	1
Fermanagh, .	21	—	—	—	1	—
Galway, .	95	4	1	0 15 6	7	2
Kerry, .	137	6	6	5 6 8	1	—
Kildare, .	60	1	1	1 13 6	8	1
Kilkenny, .	30	—	—	—	—	—
King's, .	90	4	4	1 6 11	6	—
Leitrim, .	34	—	—	—	—	—
Limerick, .	120	2	2	1 1 0	—	—
Londonderry	29	—	—	—	—	—
Longford, .	32	—	—	—	1	—
Louth, .	31	—	—	—	—	—
Mayo, .	108	2	2	1 7 6	8	—
Meath, .	52	—	—	—	2	—
Monaghan, .	13	—	—	—	2	—
Queen's, .	37	1	—	—	—	—
Roscommon, .	30	—	—	—	—	—
Sligo, .	20	—	—	—	—	—
Tipperary	65	—	—	—	—	—
(N.R.),						
Tipperary	53	4	3	1 12 6	3	—
(S.R.),						
Tyrone, .	71	1	1	0 2 6	—	—
Waterford, .	58	—	—	—	—	—
Westmeath, .	68	—	—	—	2	—
Wexford, .	27	—	—	—	—	—
Wicklow, .	62	—	—	—	4	4
Total, .	2,243	33	28	19 6	76	8

One sample of Margarine-Cheese was taken in Co. Antrim during the period. There was no infringement of the Acts in regard to the sample.

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER
THE HALF-YEAR ENDED 30TH JUNE, 1912.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecu- tions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	21	84	—	—	—
—	—	10	60	5	5	9 13 0
—	—	3	58	6	6	18 3 6
—	—	7	35	1	—	—
—	—	2	77	2	2	1 0 8
—	—	5	442	21	14	10 11 11
—	—	19	35	—	—	—
—	—	35	71	2	2	0 10 0
1	1 0 0	12	462	2	2	10 0 0
—	—	—	8	—	—	—
1	1 13 6	13	140	5	5	3 17 0
—	—	8	143	6	5	2 8 11
1	0 2 6	9	40	1	1	0 10 0
—	—	1	31	1	1	0 4 6
—	—	7	53	3	3	0 8 0
—	—	10	26	1	1	0 18 6
—	—	5	229	6	4	2 16 3
—	—	13	18	—	—	—
—	—	1	33	1	1	0 2 6
—	—	—	30	—	—	—
—	—	5	124	10	7	11 5 6
—	—	22	28	—	—	—
—	—	3	12	—	—	—
—	—	2	29	2	1	1 2 6
—	—	—	51	5	4	4 3 6
—	—	2	13	1	1	0 15 0
—	—	5	104	2	2	7 7 6
—	—	1	220	10	8	10 19 8
—	—	31	47	3	2	1 15 0
—	—	5	53	2	2	1 5 6
—	—	14	115	3	2	1 7 0
—	—	—	27	2	—	—
4	2 18 6	8	32	3	2	2 14 * 0
7	5 14 6	279*	2,930	106	83	103 19 11

* No proceedings were instituted in respect of any of these samples.

**III.—STATEMENTS GIVING PARTICULARS AS TO SAMPLES OF
UNDER THE ACTS
YEAR 1911.**

BOROUGH.	Butter.				Margarine.	
	No of Samples taken.	No of Prosecutions.	No of Convictions.	Penalties imposed.	No of Samples taken.	No of Prosecutions.
Belfast, .	108	13	13	£ s. d. 45 10 0	36	—
Clonmel, .	44	—	—	—	—	—
Cork, .	189	7	6	6 2 6	—	—
Drogheda, .	32	—	—	—	—	—
Dublin, .	107	9	9	42 10 0	6	3
Kilkenny, .	5	—	—	—	—	—
Limerick, .	160	8	8	4 1 0	7	—
Londonderry	27	—	—	—	7	—
Sligo, .	32	1	1	0 0 6	4	—
Waterford, .	62	2	2	1 11 0	—	—
Wexford, .	19	—	—	—	—	—
Total, .	785	40	39	99 15 0	60	3
Total for Year 1910,	786	26	25	56 2 1	82	7

HALF-YEAR ENDED 30TH JUNE, 1912.

BOROUGH.	Butter.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Belfast, . . .	50	1	1	£ s. d. 3 0 0
Clonmel, . . .	16	—	—	—
Cork, . . .	63	—	—	—
Drogheda, . . .	16	—	—	—
Dublin . . .	48	—	—	—
Kilkenny, . . .	7	—	—	—
Limerick, . . .	85	1	—	—
Londonderry, . . .	13	—	—	—
Sligo, . . .	8	—	—	—
Waterford, . . .	42	—	—	—
Wexford, . . .	20	—	—	—
Total, . . .	368	2	1	3 0 0

* In one of these cases the defendant was sent to jail for two months.

**BUTTER, MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS
IN THE BOROUGH.**

YEAR 1911.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
—	£ s. d.	4	662	113	100	£ s. d.
—	—	—	76	1	1	160 0 0
—	—	—	484	23	23	3 0 0
—	—	—	129	5	5	25 7 8
3	4 0 0	—	944	105	91	17 2 0
—	—	—	56	1	1	267 12 0
—	—	10	475	11	9	1 10 0
—	—	6	68	11	10	3 9 6
—	—	2	69	5	5	22 5 0
—	—	—	134	6	6	3 1 0
—	—	—	56	8	6	9 5 7
—	—	—	—	—	—	9 3 0
3	4 0 0	22	3,153	289	266	521 15 9
6	6 15 0	27†	3,135	205	188	277 7 6

HALF-YEAR ENDED 30TH JUNE, 1912.

Margarine	Cheese.	Milk.			
No. of Samples taken.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
7	1	346	52	49	£ s. d.
—	—	30	3	3	62 15 0
—	—	252	31	30	2 6 0
—	—	66	1	1	28 1 0
—	—	463	17	17*	2 10 6
—	—	33	—	—	66 0 0
—	4	266	5	5	—
—	3	22	5	5	4 17 6
1	2	39	2	2	6 2 6
—	—	109	9	9	1 5 8
2	—	54	3	3	7 0 0
—	—	—	—	—	2 6 0
10†	10†	1,690	128	124	183 4 2

† No Proceedings were instituted in respect of any of these samples.

**IV.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER
AND MARGARINE TAKEN, UNDER THE SALE OF FOOD AND
DRUGS ACTS, 1875 TO 1899, BY THE DEPARTMENT'S
OFFICERS DURING THE YEAR 1911.**

BOROUGH OR COUNTY.	BUTTER.				MARGARINE.			
	No. of Sam- ples taken.	No. of Prose- cu- tions.	No. of Con- vic- tions.	Penalties imposed.	No. of Sam- ples taken.	No. of Prose- cu- tions.	No. of Con- vic- tions.	Penalties imposed.
BOROUGH.				£ s. d.				£ s. d.
Clonmel	3	—	—	—	—	—	—	—
Cork,	2	—	—	—	—	—	—	—
Drogheda,	7	—	—	—	—	—	—	—
Dublin,	6	3*	3	20 0 0	1	—	—	—
Kilkenny,	11	—	—	—	—	—	—	—
Waterford,	7	—	—	—	—	—	—	—
Wexford,	4	—	—	—	—	—	—	—
COUNTY.								
Antrim,	31	—	—	—	—	—	—	—
Armagh,	26	—	—	—	—	—	—	—
Carlow,	17	—	—	—	—	—	—	—
Cavan,	30	2	2	0 5 0	—	—	—	—
Clare,	24	—	—	—	—	—	—	—
Cork,	143	11	11	5 16 1	—	—	—	—
Donegal,	19	—	—	—	—	—	—	—
Down,	43	—	—	—	—	—	—	—
Dublin,	24	—	—	—	—	—	—	—
Fermanagh,	13	—	—	—	—	—	—	—
Galway,	19	1	—	—	1	1	1	1 3 11
Kerry,	30	1	1	0 3 0	—	—	—	—
Kildare,	43	—	—	—	—	—	—	—
Kilkenny,	24	—	—	—	—	—	—	—
King's,	11	—	—	—	—	—	—	—
Leitrim,	2	—	—	—	—	—	—	—
Limerick,	13	—	—	—	—	—	—	—
Londonderry,	12	—	—	—	—	—	—	—
Longford,	8	—	—	—	—	—	—	—
Louth,	17	—	—	—	—	—	—	—
Meath,	31	—	—	—	—	—	—	—
Monaghan,	29	—	—	—	—	—	—	—
Queen's,	23	—	—	—	—	—	—	—
Tipperary (N.R.),	13	—	—	—	—	—	—	—
Tipperary (S.R.),	26	—	—	—	1	—	—	—
Tyrone,	19	—	—	—	—	—	—	—
Waterford,	10	—	—	—	—	—	—	—
Westmeath,	12	—	—	—	—	—	—	—
Wexford,	28	—	—	—	—	—	—	—
Wicklow,	38	—	—	—	—	—	—	—
Total,	818	18	17	26 4 1	3	1	1	1 3 11

* One of these prosecutions was for refusal to sell sample. Penalty of £5 imposed.

V.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER TAKEN, UNDER THE SALE OF FOOD AND DRUGS ACTS, 1875 TO 1899, BY THE DEPARTMENT'S OFFICERS DURING THE HALF-YEAR ENDED THE 30TH JUNE, 1912.

BOROUGH OR COUNTY.	BUTTER.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
BOROUGH.				£ s. d.
Clonmel,	3	—	—	—
Cork,	6	—	—	—
Drogheda,	4	—	—	—
Dublin,	2	—	—	—
Sligo,	3	—	—	—
COUNTY.				
Antrim,	7	—	—	—
Armagh,	29	1	1	0 2 0
Carlow,	18	—	—	—
Cavan,	12	—	—	—
Clare,	7	—	—	—
Cork,	48	—	—	—
Down,	31	—	—	—
Dublin,	21	—	—	—
Fermanagh,	22	—	—	—
Galway,	6	—	—	—
Kildare,	27	—	—	—
Kilkenny,	6	—	—	—
King's,	30	2	2	0 8 0
Leitrim,	11	—	—	—
Limerick,	21	—	—	—
Londonderry,	12	—	—	—
Longford,	3	—	—	—
Louth,	11	—	—	—
Meath,	19	—	—	—
Monaghan,	22	—	—	—
Queen's,	17	—	—	—
Roscommon,	6	—	—	—
Sligo,	9	—	—	—
Tipperary (N.R.),	19	—	—	—
Tipperary (S.R.),	20	—	—	—
Tyrone,	31	—	—	—
Waterford,	11	—	—	—
Westmeath,	20	—	—	—
Wexford,	10	—	—	—
Wicklow,	40	1	1	0 12 0
Total,	564	4	4	1 2 0

Three samples of Margarine were taken (one in Co. Armagh, one in Co. Cork and one in Co. Dublin) during the period. A sample of Cream was taken in the County Borough of Dublin. There was no infringement of the Acts in regard to three of these samples. In respect of the sample of Margarine taken in Co. Cork proceedings were instituted and penalties amounting to £2 2s. 3d. were imposed.

VI.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1912, THE
NUMBER AND DISTRIBUTION OF PREMISES REGISTERED
FOR THE MANUFACTURE OF, OR WHOLESALE DEALINGS
IN, MARGARINE OR MARGARINE-CHEESE.

BOROUGH OR COUNTY.	No. of Premises Registered for Whole- sale Dealings in Margarine or Margarine- Cheese.	No. of Premises Registered for the Manufacture of	
		Margarine.	Margarine- Cheese.
BOROUGH.			
Belfast,	49	—	—
Clonmel,	2	—	—
Cork,	8	2	—
Drogheda,	1	—	—
Dublin,	38	—	—
Limerick,	3	2	—
Londonderry,	2	—	—
Sligo,	1	—	—
Waterford,	6	—	—
Wexford,	1	—	—
COUNTY.			
Antrim,	5	—	1
Armagh,	1	—	—
Cork,	—	—	1
Down,	1	—	—
Dublin,	5	—	—
Fermanagh,	1	—	—
Galway,	2	—	—
Kerry,	1	—	—
King's,	2	—	—
Louth,	1	—	—
Tipperary (S.R.),	1	—	—
Westmeath,	1	—	—
Wexford,	—	1	—
Total,	132	5	2

VII.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1912, THE
NUMBER AND DISTRIBUTION OF PREMISES REGISTERED AS
BUTTER FACTORIES.

BOROUGH.	No. of Registered Butter Factories.	COUNTY.	No. of Registered Butter Factories.
Belfast,	1	Fermanagh,	1
Cork,	22	Kerry,	26
Dublin,	1	Leitrim,	3
Limerick,	2	Limerick,	2
Londonderry,	1	Londonderry,	1
Waterford,	1	Longford,	4
		Monaghan,	6
COUNTY.		Tipperary (N.R.),	1
Antrim,	2	Tipperary (S.R.),	1
Armagh,	2	Tyrone,	4
Carlow,	1	Waterford,	5
Cavan,	36	Wexford,	5
Clare,	2	Wicklow,	1
Cork,	29		
Donegal,	2	Total,	162

LIST of ANALYSTS acting under the Sale of Food and Drugs Acts,
1875 to 1907, for the Boroughs and Counties in Ireland.

Local Authorities.	Name of Analyst.
COUNCILS OF BOROUGHES OF :—	
Belfast,	J. Harold Totton, B.A., B.Sc., A.L.C.
Clonmel,	Sir C. A. Cameron, C.B., M.D.
Cork,	D. J. O'Mahony, F.C.S.
Drogheda,	Sir C. A. Cameron, C.B., M.D.
Dublin,	Do., do.
Kilkenny,	Do., do.
Limerick,	Do., do.
Londonderry,	Professor John Robinson Leebody, M.A., D.Sc., F.I.C.
Sligo,	Sir C. A. Cameron, C.B., M.D.
Waterford,	Do., do.
Wexford,	Do., do.
COUNTY COUNCILS OF :—	
Antrim,	T. R. Hodgson, M.A., F.I.C., and J. F. W. Hodges, F.I.C., F.C.S.*
Armagh,	J. Harold Totton, B.A., B.Sc., A.L.C.
Carlow,	Sir C. A. Cameron, C.B., M.D.
Cavan,	Do., do.
Clare,	Do., do.
Cork,	D. J. O'Mahony, F.C.S.
Donegal,	Charles McMullan.
Down,	Sir C. A. Cameron, C.B., M.D.
Dublin,	Do., do.
Fernanagh,	Do., do.
Galway,	Do., do.
Kerry,	D. J. O'Mahony, F.C.S.
Kildare,	Sir C. A. Cameron, C.B., M.D.
Kilkenny,	Do., do.
King's,	D. J. O'Mahony, F.C.S.
Leitrim,	Sir C. A. Cameron, C.B., M.D.
Limerick,	Do., do.
Londonderry,	J. Harold Totton, B.A., B.Sc., A.L.C. (temporary).
Longford,	Charles McMullan.
Louth,	Sir C. A. Cameron, C.B., M.D.
Mayo,	Do., do.
Meath,	Do., do.
Monaghan,	Do., do.
Queen's,	Do., do.
Roscommon,	Do., do.
Sligo,	Do., do.
Tipperary, North Riding,	Do., do.
Do., South Riding,	Do., do.
Tyrone,	Robert F. Blake, F.I.C.
Waterford,	Sir C. A. Cameron, C.B., M.D.
Westmeath,	Do., do.
Wexford,	Do., do.
Wicklow,	Do., do.

* Mr. Hodges, acts as Analyst for the District of Carrickfergus.

STATUTORY RULES AND ORDERS, 1912.

No. 865.

MERCHANDISE MARKS.

Official Prosecutions.

REGULATIONS, DATED MAY 7, 1912, MADE BY THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND, WITH THE CONCURRENCE OF THE LORD CHANCELLOR OF IRELAND AND OF THE BOARD OF TRADE, PURSUANT TO SECTION 1 (1) OF THE MERCHANDISE MARKS (IRELAND) ACT, 1909 (9 EDW. 7, C. 24), WITH REGARD TO THE PROSECUTION IN IRELAND OF OFFENCES UNDER THE MERCHANDISE MARKS ACT, 1887 (50 & 51 VICT., C. 28).

1. The Department of Agriculture and Technical Instruction for Ireland shall, subject to the conditions in the next following Regulations prescribed, undertake the prosecution in Ireland of offences under the Merchandise Marks Act, 1887, in cases which appear to the Department to relate to Irish agricultural produce, or to the produce of any other Irish rural industry, and to affect the general interests of the country, or of a section of the community, or of a trade.

2. (i.) Every application to the Department to undertake a prosecution shall be accompanied by the following documents:—

(a) A statement showing the nature and circumstances of the case and sufficient to enable the Department to form an opinion whether the case relates to Irish agricultural produce, or to the produce of any other Irish rural industry, and affects the general interests of the country, or of a section of the community, or of a trade.

(h) A statement showing the facts which, if the Department undertake the prosecution, will be capable of proof, and setting out the proofs and names of witnesses available to prove such facts.

(ii.) The Department may require the above statements to be supplemented or additional evidence to be furnished.

3. If, on the evidence, the Department are of opinion that there is no reasonable prospect of a conviction being obtained, the Department will not, unless they think fit, undertake the prosecution.

4. If the Department are of opinion that the prosecution would be better or more properly conducted otherwise than under these Regulations, the Department will not undertake the prosecution under these Regulations.

5. The Department may, before undertaking a prosecution, require the applicant to give security for costs on such terms and in such manner as they think proper.

6. For the purpose of carrying these Regulations into effect, the Department may, from time to time, prescribe the use of such forms and give such directions as they may deem expedient.

7. Notwithstanding anything hereinbefore contained, the Department may, if they deem fit, undertake prosecutions in Ireland in cases appearing to the Department to relate to any of the matters mentioned in paragraph 1 hereof, when the evidence is supplied in whole or part by their own officers or any of them.

In Witness whereof the Department of Agriculture and Technical Instruction for Ireland have hereunto set their Official Seal this Seventh day of May, One thousand nine hundred and twelve.

(L.S.)

T. P. Gill,

Secretary.

I concur,

Redmond Barry, C.

The Board of Trade concur in these Regulations.

H. Llewellyn Smith,

Secretary.

MARKETS AND FAIRS (WEIGHING OF CATTLE) ACTS, 1887 AND 1891.

List showing the Fairs and Auction Marts in respect of which
Exemption Orders were issued between the 1st July, 1911,
and the 30th June, 1912.

Fair or Mart.	County or County Borough.
Abbey.	Galway.
Ardee, P. Moonan & Son's Mart.	Louth.
Ardrahan.	Galway.
Athleague.	Roscommon.
Aughrim.	Galway.
Ballinlough.	Roscommon.
Blackwater, G. W. Taylor's Mart.	Wexford.
Bridgetown, G. W. Taylor's Mart.	Wexford.
Broadway, G. W. Taylor's Mart.	Wexford.
Carricknagat.	Sligo.
Cashel, W. Toppin's Mart.	Tipperary.
Causeway.	Kerry.
Clonmel, W. Toppin's Mart.	Tipperary.
Collinstown.	Westmeath.
Dromore West.	Sligo.
Drumena.	Leitrim.
Dundalk, N. B. King's Mart.	Louth.
Dunfanaghy, W. Speer's Mart.	Donegal.
Empor.	Westmeath.
Farnsharpy.	Sligo.
Fieldstown.	Dublin.
Funchinagh.	Mayo.
Killala.	Mayo.
Kilmurry McMahon.	Clare.
Kilteely.	Limerick.
Knockerochery.	Roscommon.
Knocktoran.	Limerick.
Lahardane.	Mayo.
Leap.	Cork.
Limerick, Ebrill Bros' Mart.	Limerick (Borough of).
Listowel, McElligott & Sons' Mart.	Kerry.
Magherafelt, T. Larkin's Mart.	Londonderry.
Newmarket-on-Fergus.	Clare.
New Ross, G. W. Taylor's Mart.	Wexford.
O'Callaghan's Mills.	Clare.
Oldcastle, S. Murdock's Mart.	Meath.
Rathfrán.	Mayo.
Renvyle.	Galway.
Roslea.	Sligo.
Taghmon, G. W. Taylor's Mart.	Wexford.
Tipperary, P. L. Ryan's Mart.	Tipperary.
Tubber.	Galway.
Wexford, G. W. Taylor's Mart.	Wexford.

REPORT OF THE DIRECTOR OF THE GEOLOGICAL SURVEY OF IRELAND

For the Year ending 31st March, 1912.

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.

SIR,

I have the honour to submit the following Report on the work of the Geological Survey of Ireland for the year ending 31st March, 1912.

Areas in the counties of Donegal, Londonderry, and Tyrone were geologically mapped upon the six-inch scale.

The revision of the Memoir on the Kenmare district, which was published in 1859, and is now out of print, was proceeded with, and the examination in detail for the first time of the deposits and other traces of the Glacial epoch led to results of considerable interest. The ancient lake-terraces in the valley above Kenmare may be specially mentioned.

The country round Monaghan town was also re-examined, with a view to a revised edition of the Memoir on Sheet 58, which is also out of print. Here, again, the superficial features that affect agriculture, such as the conspicuous drumlins, received special attention. A number of soils were collected and reported on in connexion with the Forestry Schemes of the Department, and the general investigation of types of Irish soils was continued.

In collaboration with the Economic Geologist to the Department, a report on available coal supplies in Ireland was drawn up for presentation to the International Geological Congress of 1913.

Considerable progress was made with the preparation of the geological map of Ireland on the scale of a quarter of an inch to a mile, the first sheet of which, embracing the country south of Dublin, is now in the engraver's hands. It is anticipated that this map will be of especial service to schools, as well as to visitors to Ireland.

Mr. C. NEWELL ARBER, M.A., Lecturer in Palaeobotany in the University of Cambridge, gave professional assistance to the Survey in the examination of Carboniferous strata in Clare Island and at Ballycastle.

The following Scientific paper was contributed during the year:—
T. HALLISSEY, with W. J. Ryan, "New Fossils from Bray Head, Co. Wicklow." *Proc. R. Irish Acad.*, Vol. XXIX B., p. 246.

I am, Sir,

Your obedient Servant,

GREENVILLE A. J. COLE.

REPORT OF THE DIRECTOR
OF THE
NATIONAL MUSEUM OF SCIENCE
AND ART
FOR THE
YEAR 1911-1912.

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit the following Report for the twelve months, from 1st April, 1911, to 31st March, 1912.

In presenting my Annual Report I have the pleasure to state that the number of visitors to the National Museum of Ireland shows a considerable increase; for the year ending 31st March, 1912, the attendance was 278,477, being 8,096 over the previous year. The practical use of the Museum for study is greatly developed. Some 600 research students worked in the Natural History Division during the year. The full number of workers recorded in this section is 2,027, and in the Botanical Division the number was 321. In the Art Division about 50 art students attended (besides many craft-pupils from workshops and technical schools). The registered students for the year numbered 2,990, an advance of 1,888 over the year 1910-1911.

Through the re-arrangement of the collections in the Lower Room of the Natural History Division we have been enabled to secure a much larger space for the exhibition of Irish Bird groups and the series of nests and eggs. The Clare Island Survey has added much interesting matter to this section.

In the Art and Industrial Collections we have been also able to add some important material relating to Ireland, including relics of the Irish Volunteers, and also some valuable Irish church plate and domestic silver. There have been further important accessions to the collection of Irish-made musical instruments, and we have obtained several very excellent Irish miniatures.

The Crypt, which had been fitted for the reception of Irish Antiquities, was thrown open in September. This addition to our space is of considerable importance, as it enables us to show such large objects as canoes and oghams, and also the more delicate exhibits from the Kilkenny Museum lent to us by the Royal Society of Antiquaries of Ireland.

The most valuable accession of the year belongs to the Georgian period, viz.: the Apollo Room, so called from the design of the beautifully modelled ceiling. Having learnt that the house No. 40 Stephen's Green had been acquired by the Bank of Ireland for new premises, I wrote to the Directors asking that they should perform the public service of presenting this room for preservation in the Museum. With a generosity worthy of imitation the Directors gave us the room, and facilitated us in every way in the transferring of it to the Museum, where it is in process of reconstruction. The gift included the ceiling and mouldings, the panels, doorways, and windows. The mantelpiece having already been sold, we purchased it in order that the restoration might be complete. When this room is ready for the inspection of the public it will prove one of the most interesting and remarkable ever shown in a Museum.

In March, 1912, we opened in the Museum a small exhibition in honour of Dr. George Petrie, M.R.I.A. To the intervention of the Department we owe the gift to the Museum of the original collection of George Petrie's

Manuscript Music of Ireland, which was spiritedly presented to us by Sir Charles Villiers Stanford. Among other exhibits were placed a number of drawings, MSS. and printed books, and the portrait of Petrie, lent by the Royal Irish Academy, and a large number of drawings and papers lent by private owners. This exhibition was officially opened, and created some stir among antiquarians and scholars.

On the occasion of the King's visit to Ireland in July, the Address to the Queen, illuminated in the School of Art, was shown in the Museum.

In April, with the approval of the Department, we arranged to open the Museum for one whole day in the week.

The sale of the Guides is satisfactory.

Of the Halfpenny Guide, now in its 50th edition, 2,862 copies have been sold during the year, and of various chapters or parts of chapters of the General Guide, 1,520 copies.

New illustrated editions of the following Guides have been brought out during the year, viz. :—Bronze and Brass, Sheffield Plate and Pewter, Iron, Glass, Christian Antiquities (3rd edition), Irish Ethnographical Collection (3rd edition).

A Guide to the Anglo-Irish Coins has been published.

Having revised the "Early Christian Art in Ireland" by Miss Margaret Stokes, I issued it as a Handbook and Guide to the Irish Antiquities collection.

The *Bulletin* has been issued for the past year as a separate publication, and contains a number of articles relating to the Museum collections, very fully illustrated, thereby supplying needful information to the public as to the changes and developments in the Museum itself, and also putting us in a position of exchange with American and Continental institutions. The following is a list of the Papers which appeared during the year :—

- "Natural History Collections." Dr. Scharff.
- "Irish Birds." Mr. Nichols.
- "Insects." Mr. Halbert.
- "Palaeobotanical Collections." Professor Johnson.
- "The Costume Collection." Mr. Buckley.
- "Elizabethan Fruit Trenchers." Mr. Toppin.
- "Two-handled Silver Cups." Mr. Westropp.
- "Museum Cases and Fittings." Mr. H. Bantry White.
- "Irish Domestic Animals." Dr. Scharff.
- "Birds useful to Agriculture, etc." Mr. Nichols.
- "The House Fly." Mr. Halbert.
- "Fresh-water Sponges" and "Fresh-water Eels." Miss Stephens.
- "Room III., Herbarium." Miss Knowles.
- "The Embroidery Collection." Mr. Buckley.
- "Cretan Pottery." Rev. H. Browne, S.J., M.A.
- "Irish Seventeenth Century Spoons in the National Museum." Mr. Westropp.
- "Thomas Perry: An Eighteenth Century Irish Musical Instrument Maker." Mr. M'Googan.
- "Three Seventeenth Century Mantel-pieces." Mr. Toppin.
- "History of the Science and Art Institutions, Dublin." Mr. H. Bantry White.
- "Natural History Collections. New Acquisitions." Dr. Scharff.
- "Irish Birds." Mr. Nichols.
- "Crustacea." Mr. Selbie.
- "Kakiyemon Ware and some Imitations." Mr. Toppin.
- "Irish Pewter." Mr. Westropp.
- "William Mossop: The pioneer Irish Medallist." Mr. M'Googan.

The following Lectures were delivered in the Museum in the courses of the year :—

- Count Plunkett: "The Educational Value of Museums."
- Mr. M. S. D. Westropp: "Irish Glass."

Mr. J. J. Buckley : " Hand-made Lace " and " Irish Point Lace."

Mr. E. Kent : " Bagpipes."

Mr. J. N. Halbert : " Useful and Injurious Insects."

Professor Cole : " Leading Features in the Geography of Ireland : A Study of the Raised Map."

Mr. W. R. Lane Joynt : " Postage Stamps."

Professor T. Johnson : " Irish types of world's oldest land plants," and " The Flowering Plants of Ireland : Their Origin."

Mr. C. M. Selbie : " Deep Sea Life."

Mr. A. M'Googan : " Thomas Perry : An Eighteenth Century Irish Musical Instrument Maker."

Mr. J. B. S. MacIlwaine : " Some Features of the British Coinage, Ancient British to Elizabeth."

Mr. A. J. Toppin : " Chinese Porcelain."

Mr. E. C. R. Armstrong : " The Early Portion of the Bronze Age."

The attendance of the public was satisfactory, the average being over 80.

In May I attended the meetings held in Dublin regarding Town Planning in Ireland, and I received by loan and gift for the Museum a large number of maps and plans for exhibition.

In May I left for London, where I took part in the meetings of the Hellenic Society, the National Art Collections Fund, the Society of Roman Studies, and the Society of Antiquaries. I had the advantage of hearing Professor Flinders Petrie lecture on the Labyrinth and Roman Portraits, and later on we obtained from him some very important painted panels illustrating the wax painting of the Roman period in Egypt. While in London, besides visiting many collections and sales, I was able to take part also in the arrangements of the Retrospective Art Exhibition. In October I left for the Continent, re-visiting the Museums of Paris, Lyons and Marseilles, and extending my journey to Algiers ; here I made a special study of Roman and early Christian antiquities. On my return I examined various collections in the South of France, principally the tapestries and monumental remains of Aix and Arles, and also the collections of Avignon, where the Palace of the Popes is being converted into a Museum. Thence I passed on to Lyons and Dijon, seeing their specialised museums, and returning *via* Paris to London.

The number of visitors from a distance to the Museum was exceptionally large and important during the year. In March a body of Australian lads arrived under the direction of the Young Australia League. In August Monsieur Riou, Senator, and the Marquis d'Estourbeillon, Deputy, and other French public men visited us. In July I received a party of Colonial Members of Parliament, and in September, many members of the Eighty Club.

Having been elected President of the Museums Association, I, with the assistance of my staff, made arrangements for the holding of the Museums Conference in Dublin in 1912. The Lord Mayor of Dublin and the following Dublin Institutions joined us in forming a Reception Committee for the worthy carrying out of the Museums' Programme :—The Royal Dublin Society, the Royal Irish Academy, the Royal Society of Antiquaries, the Royal Hibernian Academy, the Royal Zoological Society, the Royal Institute of Architects, the Architectural Association, the Classical Association, the Georgian Society, the Institution of Civil Engineers, the Engineering and Scientific Association, Dublin University, the Royal College of Surgeons, the Royal College of Physicians, the Royal College of Science, the National Gallery, University College, the Royal Veterinary College, and the Board of Visitors of the National Museum and Royal Botanic Gardens.

Mr. Colin M. Selbie was appointed to fill the vacancy in the post of Assistant in the Natural History Section.

As we found that the rule regarding age worked inconveniently for such posts, with the approval of the Treasury and Civil Service Commissioners, the age limit was altered to 20–35 in place of from 18–25.

We are indebted to Mr. Boardman Milligan for a very valuable series of stone axe-heads, a stone hammer and stone knife which he had collected for us in Northern Nigeria.

An important addition was made, during the year, to the subjects dealt with in the Circulation system. In order to help the movement of the Classical Association, we have added Circulation cases, specially adapted to the demands of classes, illustrative of Greek and Roman antiquities.

I have to record a matter of regret in the retirement of Mr. Henry Bantry White, Second Officer and Chief Clerk, who left us after 47 years service.

I hope that we may look forward to the starting of the building of the new wing at an early date. The congestion of exhibits in the Art and Industrial Section is growing serious, and some of the most beautiful objects, especially in the porcelain collection, are seen to absolute disadvantage under present conditions. The relation of Geology to the Zoological collections is fairly illustrated, but unfortunately Botany is separated by an immense interval from its proper place, so that while we show the fauna, the rocks and minerals of Ireland on the ground floor, we are compelled to leave the lesson incomplete. Furthermore, the average visitor leaves the Museum without discovering the Botanical section and there are difficulties in the way of students and teachers making use of the valuable collections stored under the roof of the building. Besides, the re-classification of portion of the Art and Industrial collection, including the Classical, Egyptian and Sculpture collections, is impossible unless adequate space in the new building is allocated.

I append the reports from the heads of the various Divisions, as well as the returns of attendance, and lists of acquisitions and loans.

G. N. COUNT PLUNKETT,
Director.

APPENDIX I.

RETURN SHOWING NUMBERS OF VISITORS TO THE NATIONAL MUSEUM OF SCIENCE AND ART.

Months.	Totals, 1910-1911	Week-days, 1911-12.		Sundays.	Totals, 1911-1912
		Mornings.	Evenings.		
April, . . .	18,816	19,865	851	2,849	23,565
May, . . .	21,437	19,142	414	2,033	21,589
June, . . .	19,723	20,301	662	1,920	22,883
July, . . .	24,860	22,285	337	2,757	25,379
August, . . .	32,740	27,985	942	2,067	30,994
September, . . .	24,881	20,309	421	2,401	23,131
October, . . .	22,538	18,717	532	3,020	22,269
November, . . .	20,173	18,783	456	2,488	21,727
December, . . .	21,292	19,308	591	2,631	22,530
January, . . .	21,405	18,881	664	2,622	22,167
February, . . .	19,479	16,814	569	2,261	19,644
March, . . .	23,037	18,704	1,063	2,832	22,599
	270,381	241,094	7,502	29,881	278,477

APPENDIX II.

REPORT OF THE KEEPER OF THE IRISH ANTIQUITIES DIVISION.

During the period from the 1st of April, 1911, to the 31st of March, 1912, 245 objects have been registered; of these 4 were acquired directly, the remainder came through the Royal Irish Academy. Many of these latter had been in the collection for some time. Among the most important objects added to the collection were—a fine stone wrist brace of the early Bronze period, found at Philpottstown, Co. Meath, presented by Mr. G. H. Orpen; 24 stone celts found in Co. Fermanagh, presented by Mr. Thomas Plunkett; a fine large polished celt purchased from Mr. Fogarty of Limerick; a gold disc stated to have been found at Armagh, purchased; four important tradesmen's copper tokens of the seventeenth century, purchased from the well-known collector of these tokens, Mr. Lionel Fletcher, and a fine bronze-winged celt, found at Clondalkin, also purchased.

The Guide to the Anglo-Irish Coins in the Royal Irish Academy's collection, by Mr. Coffey, has been revised, reprinted and re-issued as one of the Museum Guides. The arrangement of the collection of coins has been completed. The very fine collection of Irish medals is now being arranged, and the labelling, etc., is well advanced, so the collection will shortly be available for study.

The stone celts from Co. Fermanagh have been arranged and placed on exhibition in Room No. II. The interesting series of objects excavated from the Cairns at Carrowkeel, Co. Sligo, and lent by Mr. P. S. S. Gardiner, and the Misses Pfolliott, have been placed on exhibition in Room No. III. The important find of amber associated with Bronze celts and gold fibulae has been published in the Proceedings of the Royal Irish Academy, as also the remarkable set of moulds from Co. Antrim, mentioned in last year's Report. A number of drawings of bronze rapiers and swords have been made, to illustrate a paper dealing with the origin and development of the rapier. This will also be published by the Academy. During the year I have been in correspondence with a number of Foreign Archaeologists and Museums on matters connected with the collection and Irish Archaeology. The arrangement of the crypts was completed during the summer. I am gratified to notice a considerable increase in the number of serious students who are making use of the collection for the purpose of study. I am always anxious to give such students the fullest possible facilities.

Room No. I is still used as my office and preparation room, and until an office is provided, the comparative collection cannot be properly arranged.

GEORGE COFFEY.

APPENDIX III.

REPORT OF THE KEEPER OF THE ART AND INDUSTRIAL DIVISION.

This year again I have to report a steady progress in clearing off arrears of work. In addition, two extensions of museum activity have been shared in by the whole staff of this Section, namely, the resumption in an improved form of the winter lectures, and the issue of a quarterly Museum Bulletin. The preparation of the lectures and the Bulletin papers has had to be done for the greater part during extra official time.

Of the twelve lectures which constituted the series given on the Tuesday evenings in January, February, and March, seven dealt with groups of exhibits in the Art and Industrial Section, three of which were kindly undertaken by outside specialists, and four by members of the staff.

TRAVELLING.—In July, 1911, Mr. Westropp accompanied me to Queens-town, to take over the collection of porcelain, etc., bequeathed to the Museum by the late Mr. R. Gumbleton.

In October, 1911, Mr. Toppin spent a fortnight in London, and visited the chief public collections. In March, 1912, Mr. Westropp spent three weeks

in England, visiting Worcester (the Porcelain Collections), London (the public collections), and Woolwich (the Rotunda).

In March I went to Paris and visited the Louvre, Cluny, Carnavalet, Guimet, Conservatoire Museums. From Paris I went to Chartres to see the beautiful stained glass windows in the Cathedral, and the Museum of Antiquities; and to Rouen, where I saw the splendid ceramic collection in the Musée-Bibliothèque, and the interesting old Gothic churches. I also visited the Victoria and Albert Museum and Wallace Collection in London.

GREEK AND ROMAN COLLECTIONS.—An instructive series of fragments of Cretan pottery, ranging from the neolithic period (previous to 3500 B.C.) down through the bronze age, which embraces the early, middle, and late Minoan periods, to about 1100 B.C., was obtained on loan from University College Archaeological Museum through the kindness of Rev. Professor Browne. The sherds are classified and arranged chronologically, and they have attracted a good deal of attention. A very fine stone oil jar with well-marked spiral ornament, obtained from the excavations at Knossus, was also lent by University College.

EGYPTIAN COLLECTION.—A valuable contribution from the British School of Archaeology in Egypt, through the kindness of Professor Flinders Petrie, has been received. It includes a mummy of the Roman period with a painted portrait inserted in place of the usual conventional mask, and curious lattice-work linen wrapping studded with hemispherical bosses of gilt stucco. The mummy is one of a number recently found by Professor Petrie at Hawara, and the portrait is of great importance for the aid it gives to the study of painting about the second century of our era. Other additions received with the mummy are a painted and gilt cartonnage, or mummy head-piece, and a canvas mummy-cloth, painted with a figure wearing a costume which includes something very like a pallium, over a surplice.

Another upright case has been placed in this room, and some of the objects received from the Egypt Exploration Fund last year and in previous years have been arranged in it.

Mr. R. de Rustafjaell has lent four pieces of early painted cloth.

ETHNOGRAPHICAL COLLECTIONS.—The steel wall casing along the east wall of the room has at length been fitted up, and although a slight incongruity is noticeable in the style, which differs from that of the old casing, the advantages gained in additional exhibiting space are so great as to outweigh the objection. The sub-structure has been fitted up with drawers, which can be used for storage purposes. Mr. Stanton has begun the re-arrangement of the collections, which he hopes to complete this year. Very few additions have been made, and these are chiefly from the South Pacific. A small collection of British charms or amulets has been acquired.

INDIAN AND PERSIAN COLLECTIONS.—No re-arrangement of any part of these collections has been made, and only one small addition, namely, a painted mirror-case of Persian workmanship showing Christian influence, perhaps Armenian.

MUSICAL INSTRUMENTS.—The collection of violins by Irish makers has been re-arranged and given a better position in the room. Nearly all the well-known Irish violin makers are now represented in the collection, viz., Perry, Murphy and Panormo, Ward, and Molyneux. The collection of bagpipes continues to grow steadily—a very important old set of Cumbrian, or Lowland Scotch, probably early eighteenth century, having been added; and Mr. Wm. Rowsome presented a fragment of what must have been a very valuable French bagpipe (musette), namely, a *tonneau* of ivory and silver containing the drones of the instrument. This belongs to the late seventeenth or early eighteenth century. Mr. H. B. White, I.S.O., gave an interesting old flageolet, and Sir Chas. Villiers Stanford, Mus.D., kindly deposited three manuscript volumes of Dr. George Petrie's Collection of Irish music. An interesting Apollo lyre, eighteenth century, has been purchased.

FURNITURE COLLECTIONS.—The proposed alteration in the platforms has not yet been attended to, but it is hoped to have it carried out this year. A few important additions have been made, namely, an early seventeenth century staircase balustrading from Old Bawn, near Tallaght, the residence of the Bulkeleys, from which a couple of years ago an interesting old mantelpiece was obtained; a "court" cupboard, early 18th century; a bracket clock of eighteenth century Cork workmanship; an "Irish Chippendale" card table; and a pair of eighteenth century mahogany cutlery boxes. The balustrading, on account of its great height, has had to be set up in the Annexe.

An important addition has been made to these collections through the kindness of the Directors of the Bank of Ireland, who have given the ceiling, wall-panelling, and grate, from the Apollo Room, in Tracton House, St. Stephen's Green.

The ceiling is a very fine example of Georgian stucco work, of which so much was carried out in eighteenth century Dublin houses, and is dated 1746. It is intended to set it up in the Museum and furnish it in the style of the Georgian period.

JEWELLERY.—Several interesting finger-rings, necklets, and ear-rings have been purchased. A large silver rosary of eighteenth century Irish work has also been acquired.

COSTUME COLLECTIONS.—The military section has had a good many additions this year. They are a tunic of the 71st regiment and a pair of epaulettes, given by Miss E. Armstrong; a chaco of the 66th regiment; four interesting Irish Volunteer belt-plates; a gorget; and a cross-belt of the Kildare Rifles. The collection of military costume, especially of the Irish Volunteers, has received a good deal of attention from visitors since its inception some six or seven years ago, and additions have been made to it from quite unexpected sources. It is to be hoped that as the collection becomes more widely known the owners of specimens will realise the importance of having them preserved in the National Museum.

A very important addition to the ecclesiastical costume is a magnificent seventeenth century Italian Cope embroidered in brilliant coloured silks on a white ground.

COINS AND MEDALS.—The additions to the coin collections have been unusually great this year. The late Mr. P. Murphy, of Newry, bequeathed his collection numbering two hundred and seventy-five. In addition to these, purchases have been made of one hundred and seventy-nine, viz., twenty-one gold, one hundred and one silver, and fifty-seven bronze coins and tokens. These included a complete set of the coinage issued by his present Majesty George V., obtained from the Mint.

The medal collection has also been increased very materially. Two gold, twenty-one silver, and thirty-one bronze, pewter or "white metal" having been acquired, and of these but a few are of other than Irish interest. The Irish medals include a good many by the Mossops, Parkee, and Woodhouse. The others include medals by the noted French medallists, Roty and Dupré. The work of arranging and labelling these collections is being carried out by Mr. Dudley Westropp.

ARMS AND ARMOUR.—No addition of importance has been made, nor has any re-arrangement been carried out.

BOOKBINDINGS.—Four instructive specimens have been purchased: two Irish, one French, and one Italian, all of the eighteenth century.

CARVED IVORIES, ETC.—These collections have not been touched this year, and the only addition is a curious little old carved ivory figure of a Scottish shepherd playing the bagpipe.

JAPANESE COLLECTION.—Some arms formerly exhibited with the ethnographical collections have been brought to the main Japanese collection, and a number of coloured prints have been taken out of store and arranged in the wall-cases.

POTTERY, PORCELAIN, AND GLASS.—Two pieces of Italian majolica, namely, a salt-cellar, and a fountain, and one piece of French faience, an interesting old Rouen dish, have been added to the pottery.

To the porcelain have been added eight or nine British, Continental, and Oriental examples.

About two dozen items have been added to the glass, nearly all Irish—Waterford, Cork, and Dublin. A plateau, a beautiful example of old Venetian glass, is among the exceptions.

An exceptionally good roundel of fifteenth century German stained glass has been purchased.

The re-arrangement of the Oriental porcelain collections has been taken up by Mr. Toppin, who, having given the subject a good deal of attention lately, will soon be in a position to compile a reliable guide to this very fascinating branch of ceramics.

CHINESE, BURMESE, AND CINGALESE COLLECTIONS.—The Chinese collection has had three small additions, viz., a libation cup carved from a rhinoceros horn, another cup of carved jade, and an interesting bronze figure of Cheou-lao.

EMBROIDERIES AND TEXTILES.—Several very good pieces of embroidery, English, Italian, Chinese, and Japanese, have been purchased. The most valuable of the Italian specimens, a seventeenth century cope in coloured silks on a white ground, is exhibited with the ecclesiastical costume under the west-end of the gallery of the Central Court.

WATER-COLOUR DRAWINGS.—This Collection, handed over by the Royal Dublin Society in 1878, has been for some years exhibited in Passage Room II. It contains many very interesting and valuable examples of the Irish and English schools, and has been made use of a good deal by the students of the Metropolitan School of Art, who are permitted to borrow the pictures for study in the School. The hanging of the collection, done hurriedly at the time it was installed in this room, is not quite satisfactory, and it is hoped that Mr. McGoogan will devote some attention to it in the coming year.

MINIATURES.—Several very interesting additions have been made, including one of a boy attributed to Horace Hone, one by Mulvany, and a beautiful copy of the portrait of Peg Woffington by Latham in the collection of the Royal Dublin Society.

DAGUERREOTYPES, ETC.—This year for the first time some examples of the beginnings of photography have been obtained, and already quite an instructive little collection has been got together, between gifts and purchases. They are arranged in a case near the miniatures.

LACE.—Some forty examples of needlepoint, bobbin lace, embroidered net and white embroidery have been obtained. The first-named includes a very beautiful tabernacle veil, with figure work made at the Convent of the Poor Clares, Kenmare, a lappet and borders of old Italian point, and a lappet of Argentan. The bobbin lace includes a fine old Honiton veil. The embroidered net includes a Limerick lace veil. A good many of these have not been arranged for want of space.

METALWORK COLLECTIONS.—An ornamental wrought-iron overdoor, and some sections of staircase balustrading, stated to have come from Santry Court, Co. Dublin, have been purchased. A set of stocks for two delinquents, made of very heavy wrought iron, has been acquired and placed near the entrance to the Museum. It was made for the village of Dunshaughlin, Co. Meath, in 1770, and is probably unique in Ireland.

The silver plate has been augmented by about a dozen specimens, nearly all of Dublin workmanship. The domestic plate includes a very fine pierced cake basket, Dublin, 1769, a cruet, Dublin, circa 1775, and a teapot, Cork, circa 1740, and a spoon, Dublin, 1655-6. The altar plate includes a monstrance, Dublin, 1798, a chalice and paten, dated 1612, another of the early eighteenth century, and a pyx, date 1646.

ARCHITECTURAL PHOTOGRAPHS.—Mr. T. J. Westropp, M.R.I.A., has this year again allowed us to make a large number of prints from his valu-

able collection of negatives of old Irish architectural remains. The arrangement of these in a draw-out cabinet near the Dunraven Collection has been begun by Mr. Stanton, Mr. Westropp himself kindly directing the classification.

POSTAGE STAMPS.—This collection continues to grow under the supervision of Mr. Lane Joynt. Another cabinet has been added.

MUSEUM LIBRARY.—About one hundred volumes of works of reference have been added, and a card index of the whole has been begun.

LOANS TO METROPOLITAN SCHOOL OF ART.—Students are constantly at work making studies of specimens in the several departments under the supervision of the School staff. In addition, specimens are lent to the School. The following is a summary of these :—

Water-colour drawings :

13 Frames.

Prints :

Portfolio of reproductions.

Casts :

Persian lion frieze.

English woodwork, seventeenth century.

Textiles :

Two coloured plates of chasubles.

Drawing of printed cotton.

Lace :

Point D'Alencon, two pieces.

Brussels pillow lace.

Youghal collar.

One frame.

Furniture :

Chair, seventeenth century.

Chairs (2), Chippendale.

Chairs (2), nineteenth century.

Work-table.

Settee.

Chest.

Mirror, with cut glass frame.

Two photographs, and a plate of furniture.

Pottery and Porcelain :

Copy of Portland vase.

Lustre plate.

Tile.

Metalwork :

Wrought-iron pole ring.

Two locks, and balls, wrought-iron.

Brass dish, Nuremberg.

Pewter canister.

Leather work :

One circulation case.

About fifty items in all.

CIRCULATION COLLECTIONS.—There were 632 issues during the year. Three new cases were prepared, making a total of 329.

The lists (a) of Chief Acquisitions by Purchase, (b) Gifts, and (c) Loans, are appended.

J. J. BUCKLEY,
Keeper.

(a) CHIEF ACQUISITIONS BY PURCHASE.

Ethnographical Collections (Room III. G.)

Maori Staff, canoe prow, and adze.

Maori stone implements.

Kingsmill swords (2).

Ivory headed adze, New Guinea (?).

Collection of British charms and amulets.

Musical Instruments (Room VII. G.)

- Set of Lowland Scotch bagpipes.
- Cithar, 18th century Dublin manufacture.
- Apollo lyre, French, 18th century.

Furniture (Rooms VIII., IX., and X. G.)

- Staircase, Irish, 17th century.
- Court Cupboard, English, early 18th century.
- Bracket clock, Cork manufacture, 18th century.
- Irish Chippendale table, 18th century.
- Mahogany cutlery cases, Irish or English, 18th century.
- Tea-caddy, Irish, early 19th century.

Bijouterie (Central Court).

- Fans (3).
- Finger-rings (3).
- Ear-rings (5).
- Royalist badge, English, 17th century.
- Silver rosary, 17th-18th century.
- Spy-glass, First Empire period.

Costume (Central Court).

- Ecclesiastical—Cope, 17th century, Italian.
- Civil—(see Lace Collection).
- Official—none.
- Military—Volunteer belt-plates (5).
- Gorget (1800-1820).
- Cross-belt, Kildare Rifles.

Coins (Central Court).

- Penny, Ethelred II.
- Angel of Henry VII.
- Unit of James I.
- Crown, Charles I.
- Five pound piece, Edward VII.
- Set of George V. coinage (12).
- Dublin token, 1663.
- Galway token, 1670.

Medals (Central Court).

- Mossop, bronze : David Latouche, 1785.
- " Lord Charlemont, 1786.
- " Baron Rokeby, 1789.
- Mossop pewter : Lord Charlemont, 1786.
- Mossop silver : Baron Rokeby, 1789.
- Mullingar School, silver, 1788.
- Miltown Fuzileers, gold, 1780.
- Roty, silver.
- Dupré, silver.
- and forty-five others.

Ivories, etc. (Room VI. F.)

- Ivory Figure : Scottish Bagpiper.

Ceramic Collections (Room VIII. F.)

- Pottery : Majolica salt-cellar, 17th century.
- " fountain, 17th century.
- Faience dish, 18th century.
- English delft dish, 18th century.
- Porcelain : Chinese kylla, Ming period.
- Japanese bowl, Kaki-yemon.
- Chelsea plate, 18th century.
- Worcester teapot, 18th century.
- Bow teapot, 18th century.
- Rudolstadt coffee-pot, cup and saucer, 18th century.

Glass Collections (Room VIII. F.)

- Irish : Tripod bowl.
- Candelabrum.
- Bowl and cover.
- Butter dish.
- Candlestick.
- Decanters (2).
- Wine-cistern.
- Decanter—"Cork Yeomanry."
- Fruit dish.

Foreign : Venetian plateau.

Painted window roundel, German, 16th century.

China, Burma and Ceylon (Room IX. F.)

- China : Bronze figure of Cheou-lao.
- Jade libation cup.
- Libation cup of rhinoceros horn.
- Embroidered cushion cover, panels, and shawl.

Embroideries and Textiles (Room X. F.)

- Chinese : See Room IX., F.)
- Japanese : Two panels.
- Italian : Four specimens.
- Cope (exhibited with costume).
- Sicilian : Two specimens.
- English : Shawl, coloured silks on cream ground.
- French : One specimen.

Lace (Main Gallery, S. and E.)

- Needlepoint : Kenmare tabernacle veil and insertion.
- Alençon border.
- Argentan lappet.
- Venetian lappet.
- Italian borders (2).
- Bobbin lace : Brussels lappets
- Honiton veil.
- Others : "Limerick" veil.

Miniatures (Main Gallery, S.)

- A boy, attributed to Hone.
- Peg Woffington, after Latham.
- Old man, by Mulvany.
- and four others.

Bookbindings (Main Gallery, S.)

- Italian (1), 1771.
- French (1), 18th century.
- Irish (2), 18th century.

Ironwork (Main Gallery, N.)

- Staircase balustrade, Irish, 18th century.
- Overdoor, Irish, 18th century.
- Stocks for two delinquents (at entrance).

Silver (Rotunda Gallery).

- Cake basket, Dublin, 1769.
- Cruet, Dublin, 1770-80.
- Salt-cellar, Dublin, *circa*, 1770.
- Spoon, Dublin, 1655-6.
- Sugar-tongs, Dublin, 1720-30.
- Monstrance, Dublin, 1798.
- Teapot, Cork, *circa*, 1740.
- Pyx, Irish, 1646.
- Chalice (Woolferston), Irish, 1612.
- Chalice (Kieregan), Irish, 18th century.
- Spoon, London, 1701-2.

(b) GIFTS, 1911-12.

- Admiralty Office, Hydrographic Department—
Collection of surveying instruments.
- J. T. Andrews, Esq.—
Medal, by J. Woodhouse.
- Mrs. J. T. Andrews—
Portrait bust of Lord James Butler, Belleek porcelain.
- J. Ardagh, Esq.—
Coins (3).
- Miss Elizabeth Armstrong—
Coatee, 71st Regiment.
Two pairs of epaulettes, and buttons, Irish Constabulary.
- Governors of the Bank of Ireland—
Ceiling, wall-panelling and grate from Tracton House, 40 St.
Stephen's Green.
- Miss Bastable—
Border, drawn muslin.
- David M. Bell, Esq.—
Piece of French lawn.
- F. Bradbury, Esq.—
Glass bottle, English.
- Trustees of the British Museum—
"Medallie Illustrations," Parts 18 and 19.
- British School of Archaeology in Egypt—
Mummy with portrait.
Mummy head piece, and painted cloth.
Collection of wrappings.
- Rev. Prof. H. Browne, M.A.—
Collection of Minoan potsherds.
- Major G. E. Bruce—
Two iron adze heads, Southern Nigeria.
- Burlington Fine Arts Club—
Catalogues (2) of exhibitions of porcelain.
- F. E. Cairns, Esq.—
Obsidian and pottery from Mexico.
- Commissioners of Public Works—
Six enamelled pottery tiles.
- Corporation of Dublin—
Maps of sites for workmen's dwellings.
- Dalkey Urban District Council—
Maps of sites for workmen's dwellings.
- Dublin Artisans' Dwellings Co.—
Maps of sites for workmen's dwellings.
- Dublin United Tramways Co.—
Photographs and maps of workmen's dwellings.
- Egypt Exploration Fund—
Collection of Egyptian antiquities.
- W. T. Macartney Filgate, Esq.—
Exhibit showing glove manufacture.
Exhibits showing utilisation of bone and horn.
- Mrs. Gainfort—
New Zealand flax blanket.
- E. G. Grennan, Esq.—
Collection of Kaverondo weapons.
- Bequest of the late W. E. Gumbleton—
Collection of porcelain, etc. (209 pieces).
- R. D. Hegarty, Esq.—
Exhibit showing felt hat manufacture.
- Miss Herdman—
Photographs of Sion Village.

- Mrs. Hetherington—
Lady's net cap.
- Talbot Hugbes, Esq.—
Specimens of 18th century brocades.
- Miss Hutton—
Medal: Horticultural Society of Ireland.
- Inspector-General, Royal Irish Constabulary—
Two rifles.
- Mrs. Lecky—
Model of a battleship.
- Lurgan Urban District Council—
Photographs of street improvements.
- Messrs. M'Laughlin and Harvey—
Wooden water pipes (3), together with map showing site on which they were found.
- J. B. S. MacIlwaine, Esq.—
Fishing reel.
- Mrs. C. E. Martin—
Devonshire lace lappet.
- Capt. G. W. Massey—
Fragments (4) of Roman and Cypriote pottery.
- Bequest of the late P. Murphy—
Collection of Coins (275).
- Ratbdown No. 1 Rural District Council—
Photographs of labourers' cottages.
- Roscrea No. 1 Rural District Council—
Photographs of labourers' cottages.
- Wm. Rowsome, Esq.—
Portion of a musette.
- Sir Charles Villiers Stanford, Mus.D.—
Manuscript (3 vols.) of George Petrie's collection of Irish music.
- Dudley Westropp, Esq.—
Belleek plate.
Daguerreotype portrait.
Medal, by J. Woodhouse.
- H. Bantry White, Esq., I.S.O.—
Boxwood flageolet.
Daguerreotypes (2) and early photographs (2).
Medal: Royal Dublin Society.
- Capt. Neville R. Wilkinson, F.S.A.—
Sculptured stone holy water stoup.
- F. Willson Yeates, Esq.—
Die of W. Mossop's portrait medal of Henry Quin.

(c) LOANS.

- Estate of the late George J. Clarke—
Two U.S.A. naval service medals.
- Miss Crawford—
Daguerreotypes (3), and a photograph.
- Mrs. E. M. Delamer—
Silver chalice and paten.
- G. A. Dillon, Esq.—
Ushabti figure.
- Tbeo: A. Dillon, Esq.—
Silver medal: Innocent XI.
- Great Southern and Western Railway—
Model of railway carriage.
- Messrs. Hopkins and Hopkins—
Silver casket presented to C. S. Parnell.

- Talbot Hughes, Esq.—
Collection of textiles.
- C. H. Keane, Esq., M.A.—
Greek inscribed slab.
Eleven pottery figures.
- Miss M. E. Longfield—
Collection of porcelain, etc.
- Mrs. Dames Longworth—
Two silver tankards.
African brass wine press.
Porcelain, etc.
- The Misses Newton—
Collection of Chelsea and Bow figures, etc.
Two silver cups.
Silver dish ring, cream ewer, snuffers, etc.
- Sir John Nutting, D.L.—
Green jade vase.
Chinese vase, Ming porcelain.
- L. O'Callaghan, Esq.—
Teapot, Chelsea-Derby porcelain.
- C. A. Pim, Esq.—
Collection of glass.
- Count Plunkett—
Four silver medals.
- R. E. Price, Esq.—
Spring gun.
- Col. W. J. R. Rainsford, C.I.E.—
Collection of Chinese porcelain, etc.
- Mrs. Rowlette—
Baby's robe.
- Royal Irish Academy—
Map of Dublin in 1801.
- R. de Rustafjaell, Esq., F.R.G.S.—
Greek marble stele.
Two fragments of Pompeian fresco.
Egyptian painted cloth, 4 pieces.
- St. Columba's College—
Collection of silver gilt plate.
- Major Smyth—
Horn snuff box.
- Rev. J. E. Stephens—
Two chalices and patens.
- John O. B. Tandy, Esq.—
Copy of general pardon, 1798.
Flint-lock pistol.
Cavalry guidon.
- A. J. Toppin, Esq.—
Chinese Ming porcelain figure.
- University College Museum, per Rev. Prof. H. Browne—
Collection of Minoan potsherds.
Stone jar from Knossos.
- Victoria and Albert Museum—
Collection of illuminated manuscripts.
- H. Bantry White, Esq., I.S.O.—
Portable sundial.

APPENDIX IV.

REPORT OF THE KEEPER OF THE NATURAL HISTORY COLLECTIONS.

SIR,

In my last report I alluded to the establishment in the Museum of a Students' Room. As the latter is becoming better known more students are availing themselves of the great advantages offered for study. The attendance book in the room was signed by 2,027 Students, all of whom made use of the special collections during the period from the 1st April, 1911-31st March, 1912. This number does not include research students, who, as heretofore, prosecute their studies in the private offices of the staff. Their numbers I compute roughly at about 600 during the year.

The new underground Store has not received the necessary fittings owing to lack of funds, and cannot on that account be utilised as yet for the purposes which it was intended for.

The vacancy which arose owing to Mr. Southern's transfer to the Fisheries Branch of the Department, has been filled up by the appointment of C. M. Selbie, B.Sc.

I had the privilege of being permitted to visit London twice last year, and also Hamburg, Berlin and Cologne for the purpose of inspecting Museums and specimens offered for sale.

As the result of this visit to Germany I was able to make arrangements for the acquisition of two magnificent mounted specimens and of two skeletons of the West African Gorilla. In London I inspected a rare Tibetan Bear which was subsequently bought for the Museum. These two great purchases more than exhausted the annual grant.

The gifts received during the past year include two particularly interesting specimens, one being the splendidly mounted "Kilkullen," one of the famous breed of old Irish wolfhounds given by Mr. Pierce O'Mahony. The other is a very fine Gharial, nearly 17 feet long, from India, presented by the Hon. R. T. Greer.

The following reports in connection with the Clare Island Survey were published during the past year by members of the staff:—

J. N. Halbert—Acarinida : Section Hydracarina, Clare Island Survey. Proc. R. I. Acad., Vol. XXXI., 44pp. 1911.

Jane Stephens—Fresh-water Porifera, Clare Island Survey. Proc. R. I. Acad. Vol. XXXI., 18 pp. 1912.

I herewith submit a list of the donations registered by me during the past year.

R. F. SCHARFF,
Keeper.

DONATIONS OF SPECIMENS, 1911-12.

Alcock, Mrs.—

Small collection of Bats.

Alexander, Arthur—

Skins of reindeer and rabbit from Newfoundland.

Barrett-Hamilton, Major—

Black-tailed Godwit (*Limosa belgica*), Pochard (*Fuligula ferina*) and four rabbit skins (*Lepus cuniculus*) from Co. Wexford.

Barrington, R. M.—

Glaucous Gull (*Larus glaucus*) from Clare Island.

Bell, Alfred—

Collection of crag fossils from Essex.

Bell, G. F.—

Two specimens of *Tropidonotus* from India.

Black, J.—

Longhorn beetle (*Hylotrupes bajulus*) from Avondale, Co. Wicklow.

Boulenger, G. A.—

Two specimens of *Salamandra maculosa* (forma typica) from near Genoa.

Browne, F. Balfour—

Hamonia appendiculata from L. Neagh, Co. Armagh.

Browne Clayton, Miss—

Little Auk (*Mergulus alle*) from Portmarnock, Co. Dublin.

Carpenter, Prof. G. H.—

Dipteron Gall caused by *Hormomyia fagi* from England.

Casement, Sir Roger—

Small collection of butterflies from the Forest of the Igaraparana, S. America.

Coghlan, Miss Charlotte—

A Blue-fronted Amazon (*Chrysotis aestiva*) from S. America.

Collier, F.—

Char (*Salmo colii*) from Castle Lake, Kylemore, Co. Galway.

Creagh-Howard, Capt. L. C.—

Long-tailed Duck (*Haroldia glacialis*) and black form of Common Guillemot (*Uria troile*) from Co. Kerry.

Daniel, Karl—

Small collection of Coleoptera from Caucasia.

Drummond, A. H.—

Char (*Salmo colii*) from Derrynkeen Lough, Co. Galway.

Dublin Steam Trawling Co.—

A very large Lobster (*Homarus vulgaris*) from the Irish Sea off the Welsh Coast.

Ellison, Rev. C. S. S.—

Variety of Blackbird (*Turdus merula*) from Co. Carlow.

Farran, G. P.—

Freshwater Sponge (*Heteromeyenia rydersi*) from L. Nahillion, Co. Galway.

Fitzherbert, R.—

Portion of Skull of Ox (*Bos sp.*) from 8 feet below the surface near Navan.

Forbes, A. C.—

Mongoose trapped between Wicklow and Arklow, and a Beetle (*Gibbium scotias*) from Rochdale, Yorkshire.

Geach, G. C.—

Young Guillemot (*Uria troile*) from Clontarf, Co. Dublin.

Grant, Col. C. C.—

Collection of Fossils from Ontario, Canada.

Greer, The Hon. R. T.—

Gharial (*Gavialis gangeticus*) from River Gondak, Bengal.

Grimshaw, P. H.—

Collection of Invertebrates from Clare Island.

Halbert, J. N.—

Collection of Insects, Mites, etc., from Westport district.

Headley, Lord—

Mounted specimens, male and female, of a buff variety of Common Rat (*Mus decumanus*) from Headford, Co. Galway.

Hughes, E. A.—

Brambling (*Fringilla montifringilla*) from Thurles, Co. Tipperary.

Johnston, Miss Alice.

Fossil Cephalopod (*Euthenoceras*) from Tawlaught, Ballynahaglish, Co. Kerry.

Kane, W. F. de V.—

Small collections of Lepidoptera, etc., from Clare Island district.

Kelsall, Major H.—

Skull of Serval (*Felis serval*) from Sierra Leone.

Kelsall, Capt. T. E.—

Two eggs of Eagle Owl (*Bubo ignavus*) and of Bonelli's Eagle (*Nisus fasciatus*), and a clutch of 14 eggs of Red-legged Partridge (*Caccabis rufa*), from near Gibraltar.

- Kelsall, Lt.-Col.—
One egg of Sarus Crane (*Antigone collaris*), from Chenauta, Punjab, India.
- Kew, H. Wallis—
Collection of Invertebrates from Clare Island.
- Levinson, G. M. R.—
Theyaria lichenastrum from Singapore.
- Longfield, Miss—
Seventeen skins of American Birds.
- Mackay, A.—
Specimen of a curiously coloured Eel (*Anguilla vulgaris*) from Castleconnell, Co. Limerick.
- M'Cabe, Messrs.—
Crab (*Paramola cuvieri*) and a few encrusting sponges dredged off Mizen Head, Co. Cork, at a depth of 195 fathoms.
- Mapother, T. A. P.—
Nightjar (*Caprimulgus europæus*) from Kiltewan, Co. Roscommon.
- Martin, Mrs.—
A very large specimen of Starfish (*Asterias rubens*) from Howth, Co. Dublin.
- Miller, J. E. L.—
Specimen of Granite from Miller Quarries, E. Weymouth, Mass.
- Newton, Robert.—
Barn Owl (*Strix flammea*) from Dungannon, Co. Tyrone.
- Nichols, A. R.—
Collection of Polyzoa, etc., from Co. Mayo.
- Nicholson, G. W.—
Beetle (*Quedius obliteratus*) from Clover Hill, Co. Cavan.
- O'Donnell, C.—
A large stone marked with seaweed impressions, etc., from Kilronan, Aran Island.
- O'Mahony, Pierce.—
Mounted specimen of Irish Wolfhound (*Canis familiaris*).
- Perceval, J. J.—
Bernacle Goose (*Bernicla leucopsis*), Red-breasted Merganser (*Mergus serrator*), two specimens of Gadwall (*Chaulelasmus streperus*), and Pintail Duck (*Dafila acuta*) from Co. Wexford.
- Phillips, R. A.—
Crayfish (*Potamobius pallipes*) from Cloughjordan, Co. Tipperary.
- Pigot, Rev. E. F.—
Marine Worms (*Palolo viridis*) from Samoa.
- Poole, C.E. Lane—
Python sebae from Sierra Leone.
- Praeger, R. Ll.—
Tubularia indivisa from Clare Island.
- Praeger, R. Ll. and A. W. Stelfox.—
Collection of Freshwater Sponges from Inishturk, Inishbofin, and Achill.
- Power, J. Talbot.—
Stoat (*Mustela erminea hibernica*) shot at Leopardstown Park, Co. Dublin.
- Power, P.—
Sparrow Hawk (*Accipiter nisus*) from Cappagh, Co. Waterford.
- Rathborne, H. B.—
White-eared Bulbul (*Pycnonotus leucotis*) from Persia, Field Vol. (*Microtus agrestis*) and Shrew (*Sorex araneus*) from Walms, Kent.
- Sladen, R. H.—
Small collection of Bees (*Bombus*) from England.
- Southern, R.—
Collection of Halacaridæ (Sea Mites) from Blacksod Bay, Co. Mayo.

- Stelfox, A. W.—
Collection of Irish Land and Freshwater Mollusca.
- Stephens, Miss J.—
Collections of Invertebrates from Clare Island, Donegal, etc.
- Thomas, the late W. J.—
Mounted specimen of Trout (*Salmo fario*) from Lough Ennel, Co. Westmeath.
- Tiernan, John—
Fragment of right antler of Irish Elk (*Cervus giganteus*) from Craughan, Boyle, Co. Roscommon.
- Trevelyan, Major—
Collections of Freshwater Sponges and a few Water-fleas (*Eurycerus lamellatus*) from Cos. Fermanagh, Donegal and Antrim.
A small collection of Irish Land and Freshwater Mollusca.
- Ussher, R. J.—
Human Skull from N. Inishkea Island, Co. Mayo.
Two specimens of Daubenton's Bat (*Myotis daubentoni*) and Barn Owl (*Strix flammea*) from Co. Waterford. A Grey Wagtail (*Motacilla melanope*) from Clare Island.
- Wailes, G. H.—
Collection of Rhizopods from Clare Island, Inishturk, etc., and Microscopical Slides of *Nebela tabulata* and *N. lageniformis* from Caher Island.
- Ward, Rowland—
Mounted specimen of Tarpon (*Megalops atlanticus*) from Florida.
- Welch, R.—
Collections of Invertebrates from Clare Island, etc.
- Westropp, D.—
Twelve specimens of Moth (*Bryophila muralis*) from Co. Cork.
- Williams & Son.—
Lower jaw and disused toe bones of Irish Elk (*Cervus giganteus*) from Ballybetagh Bog, Co. Dublin.
- Wize, Miss—
Little Auk (*Mergulus alle*) from Rathlarnham, Co. Dublin.
- Young, W. C.—
Death's Head Hawk Moth (*Acherontia atropos*) from Dublin.

LOANS.

- Spinks, Capt. C. W.—
Nine Heads and Horns of Big Game (Hartebeest, etc.)
One Skull and Horns of Hartebeest.

DONATIONS OF BOOKS AND PAMPHLETS, 1911-12.

- Academy of Natural Sciences of Philadelphia—
Annual Reports for 1909 and 1910.
- American Museum of Natural History—
42nd Annual Report. New York, 1911.
- Australian Museum, Trustees of—
Records, Vol. IX., No. 2. Sydney, 1911.
- Board of Agriculture and Fisheries—
The Food of some British Birds. By R. Newstead. London, 1908.
- Bolton, H.—
Faunal Horizons in the Bristol Coalfields. London, 1911.
- Booth Museum, Brighton—
Guide to the Museum. Brighton, 1911.
- Braun, M.—
Pamphlet.

British Museum, Trustees of—

Catalogue of the Freshwater Fishes of Africa in the British Museum.
Vol. II. By G. A. Boulenger. London, 1911.

Catalogue of the Lepidoptera Phalaena in the British Museum.
Vol. X., and Plates. By Sir G. F. Hampson, Bart. London,
1911.

A Handbook of the Tsetse-Flies (Genus *Glossina*). By E. E. Austen.
London, 1911.

Brooklyn Institute—

Science Bulletin. I., Nos. 1-6, 11, 14-16. 1901-9.

Chilton, C.—

Two Pamphlets.

Cornetz, V.—

Pamphlet.

Elmhirst, R.—

Six Pamphlets.

Farman, G. P.—

Plankton from Christmas Island, Indian Ocean. I. Copepoda.
London, 1911.

Copepoda from Bulletin Planktonique. 1910.

Field Museum of Natural History, Trustees of—

Publications, 148, 149, 150, 151.

Froggatt, W. W. —

March Flies. Sydney, 1911.

Halbert, J. N.—

Pamphlet.

Hedley, C.—

Report on the Mollusca obtained by the 'Endeavour.' Part I.
Sydney, 1911.

Ihering, H. von.—

Revista do Museu Paulista. Vol. VIII. Sao Paulo, 1911.

Notas Preliminares. Museu Paulista. Vol. I., fasc. 2. Sao Paulo,
1911.

Indian Museum, Trustees of—

Annual Report. 1910-1911. Calcutta, 1911.

Records. Vol. III., Pt. 4; Vol. IV., Pts. 1, 2, 3, 4, 5, 6, 7, 8, 9;
Vol. V., Pts. 1, 2, 3, 4; Vol. VI., Pts. 1, 2, 3, 4, 5. Calcutta,
1909-11.

Memoirs. Vol. II., No. 4; Vol. III., Nos. 1, 2. Calcutta, 1910.

Alecyonarians of the Indian Ocean, Pt. II. By J. A. Thompson, J. J.
Simpson, and W. D. Henderson. Calcutta, 1909.

Fauna of British India. Freshwater Sponges, Hydroids and Polyzoa.
By N. Annandale. London, 1911.

Irish Naturalist, Editors of—

The Naturalist for 1911.

Boletín del Museo Nacional de Chile. Tomo II., No. I. Santiago,
1910.

Kirsch, A. M.—

Pamphlet.

Lönnberg, E.—

Two Pamphlets.

London County Council—

Ninth Annual Report of the Horniman Museum and Library.
London, 1910.

McAtee, W. L.—

U. S. Department of Agriculture. Bulletin 39. Washington, 1911.

Milwaukee Public Museum, Trustees of—

Twenty-eighth Annual Report. Milwaukee, 1911.

Bulletin, Vol. I., Part 2. Milwaukee, 1911.

- Meek, A.—
Two Pamphlets.
Northumberland Sea Fisheries Committee. Report on the Scientific Investigations for 1910 and to June 15, 1911. Newcastle-upon-Tyne, 1911.
- Museum of Comparative Zoology, Harvard College, Cambridge, Mass.—
Some New American Fossil Crinoids. By F. Springer. Cambridge, U.S.A., 1911.
- National Library, Dublin, Trustees of—
Subject Index of Books added to the National Library, Dublin, 1894-1903. Dublin, 1911.
- Newton, E. T.—
Pamphlet.
- Nichols, A. R.—
Pamphlet.
- Norman, Canon A. M.—
Three species of Harpacticoid Copepoda. London, 1911.
- Osborn, H. F.—
Biological conclusions drawn from the study of Titanotheres. New York, 1911.
- Oudemans, A. C.—
Nine Pamphlets.
- Pearson, J.—
Spolia Zeylanica. Vol. VIII. Pt. 39. Colombo, 1912.
Ceylon Administration Reports for 1910-11. Colombo, 1911.
- Potts, F. A.—
Two Pamphlets.
- Royal Dublin Society—
Scientific Proceedings. (Vol.) XII. (N.S.), Nos. 28, 33; Vol. XIII. (N.S.), Nos. 1, 2, 8, 9, 12, 13, 14, 16. Dublin, 1910-1912.
Economic Proceedings. Vol. I., Nos. 1-14; Vol. II., Nos. 1, 2, 3, 4. Dublin, 1899-1911.
- Royal Irish Academy—
Proceedings. Vol. XXVII, Section B. No. 2; Vol. XXVIII., Section B. Nos. 4, 5; Vol. XXIX, Section B. Nos. 1, 5, 6, 7, 8, 9; Vol. XXXI. Nos. 2, 4, 5, 10, 11, 12, 13, 22, 23, 24, 26, 29, 35, 36, 37, 38, 39, 51, 52, 60, 63, 65. Dublin, 1911-12.
- Sarawak Museum—
Ninth Report, 1910. Sarawak, 1911.
- Scharff, Dr. R. F.—
Thirty-eight Pamphlets.
U. S. Department of Agriculture. Bulletin, 37. Washington, 1911.
Biscayan Plankton. "Research." 1900. Pt. 13. The Siphonophorae. By H.B. Bigelow. London, 1911.
The History of the European Fauna. London, 1899.
European Animals. London, 1907.
Distribution and Origin of Life in America. London, 1911.
The Report of the Albatross Expedition. XXIII. The Siphonophorae. By H. B. Bigelow. Cambridge, U.S.A., 1911.
- Secretary of State for India.—
Fauna of British India. Coleoptera. By W. W. Fowler. London, 1911.
- Sedgwick Museum, Cambridge—
Forty-fifth Annual Report of the Museums and Lecture Rooms Syndicate. Cambridge, 1911.
- Smithsonian Institution—
Bulletin, 71 Pt. II., 75, 76, 77.
Cambrian Geology and Palaeontology, II., Nos. 2, 3, 5. By C. D. Walcott. Washington, 1911.
The Crinoid Fauna of the Knobstone Formation. By Frank Springer. Washington, 1911.

- The Waverlyan Period of Tennessee. By R. S. Bassler. Washington, 1911.
- U.S. National Museum :—
 Proceedings, Vol. 38, 39. Washington, 1911.
 Report for the year ending June 30, 1910. Washington, 1911.
- Société Portugaise des Sciences Naturelles—
 Vol. IV., fasc. 3., Vol. V., fasc. 1. Lisbonne, 1910, 11.
- Springer, Frank—
 On a Trenton Echinoderm Fauna at Kirkfield, Ontario. Ottawa, 1911.
- Steindachner, F.—
 Notizen. Jahresbericht für 1909. Wien, 1910.
- Studer, T.—
 Two Pamphlets.
- Trouessart, E. L.—
 Two Pamphlets.
- Verboeff, K. W.—
 Sixteen Pamphlets.
- Ward, Rowland—
 The Sportsman's Handbook. London, 1911.
- Yorkshire Philosophical Society—
 Annual Report for MCMX. York, 1911.
- Zoological Museum, Berlin—
 Anleitung zum Sammeln, Konservieren und Verpacken von Tieren
 Berlin, 1907.

APPENDIX V.

REPORT OF THE CUSTODIAN OF THE BOTANICAL DIVISION.

HERBARIUM, ROOM III.

Room III.

Many plants were named for visitors and correspondents.

The identification of the Lichens collected by Miss M. C. Knowles on the Clare Island Survey was completed and the specimens mounted and incorporated in the Irish Lichen Collection to which they form a valuable addition.

A large number of Seedlings of native plants was acquired and the collection of Seeds considerably added to.

Numerous additions were also made to the collection of Flowering Plants.

ECONOMIC COLLECTIONS.

Rooms II. and IV.

The re-arrangement of the Fossil Collections in Room IV. in the shallow wall-cases is well advanced. A representative collection of 250 fossil plants of all groups has been acquired for comparative study. An order for additions to the set of sections of fossil plants is uncompleted owing to the Coal strike.

The equipment of Rooms IV. and V. with upright cases is still incomplete.

Rooms I. and III. have been greatly improved by the provision of Osram lamps. The other rooms need these too, as the specimens and labels are seen with difficulty in the evenings at present.

T. JOHNSON.

LIST OF DONATIONS, 1911-1912.

- Adams, J.—
100 sheets of named fungi from various parts of Ireland.
- Blackwood, Miss—
Specimens of *Asphodelus subalpinus* from Carnac.
- Knowles, Miss M. C.—
Thirty-five specimens of rare Lichens, chiefly British.
- Marshall, Rev. E. S.—
Five sheets of *Saxifraga hirta*, from Brandon, Co. Kerry.
- M'Clintock, Miss K.—
Specimen of Snake nut (*Ophiocaryon paradoxum*) from Demerara
- Welch, R.—
Fossil "Kauri Gum," showing the resin and the coal formed from the fossil wood.

BOOKS AND PAMPHLETS.

- Annals of the Royal Botanic Gardens, Calcutta. Vol. XII. Pts. 1 and 2.
- Agricultural Gazette, New South Wales. Vol. 12.
- Agricultural Ledger.
- British Lichens. Vol. II. By A. Lorrain Smith, F.L.S. Pres. by Trustees of the British Museum.
- Bulletin of Miscellaneous Information. Kew. 1909-1911.
- Critical Revision of the Genus *Eucalyptus*. By J. H. Maiden. Vol. II. Part 3.
- Contributions, U. S. National Herbarium. Vol. 13, Pts. 8-12; Vol. 14, Pt. 3; Vol. 16, Pt. 1.
- Flora of Jamaica. Vol. I, Orchids. By W. Fawcett, B.Sc., and A. B. Rendle, F.R.S. Pres. by Trustees, British Museum.
- Journal of the Dept. of Agr., Victoria, Australia. Vol. IX. Nos. 3-12.
- Imperial Dept. of Agr., West Indies. Nos. 67, 68, 69, and 70.
- Journal, Board of Agric. and Fisheries, England. Vol. XVIII.
- Leaflets Nos. 74, 146, 179, 233, 240, 243, 244, 246, 248, 249, 250, 252-255, 257, 260.
- Leaflets 1-100 bound in one volume.
- Leaflet No. X. Poultry Organisation Society.
- Journal, Department of Agr. and Techn. Inst., Ireland. Vol. XII. Nos. 1 and 2.
- Plants Indigenous to Victoria. By A. J. Ewart, Melbourne University. Vol. II.
- Pinks of Western Europe. By F. N. Williams, F.L.S.
- Report of the Lichen Exchange Club of the British Isles. 1911.
- Report of the Botanic Gardens and Government Domains for the year 1910, with photographs.
- Report of the Botanical Club of Canada for 1909. By A. H. Mackay, LL.D.
- Scientific Proceedings of the Royal Dublin Society. Vol. XIII.
- (N.S.) No. 1. A Seed-bearing Irish Pteridosperm. By T. Johnson, D.Sc., F.L.S.
- No. 8. Is *Archaeopteris* a Pteridosperm? By T. Johnson, D.Sc., F.L.S.
- No. 9. The Occurrence of *Archaeopteris Tschermaki* Stur. and of other species of *Archaeopteris* in Ireland. By T. Johnson, D.Sc., F.L.S.
- West Indian Bulletin. Vol. XI. Nos. 3 and 4.

APPENDIX VI.

REPORT OF THE CUSTODIAN OF THE MINERAL AND GEOLOGICAL COLLECTIONS.

Among the specimens obtained by purchase, the following may be specially noted :—

A model of the large mass of Carbonado, or black diamond, found before 1895 in Brazil. The original weighed 3,073 carats.

New examples of twinned Calcite from Egremont, Cumberland.

Silver ores from Calstock, Cornwall.

Hamborgite, the rare glucinum borate, from Madagascar.

A fine specimen of Copper Uranite from Calstock, Cornwall.

A specimen of Cassiterite (Tinstone) from the Rustenburg district, Transvaal, was given by Mr. W. L. Armstrong.

Numerous specimens were added which satisfactorily fill gaps in the general collection of minerals.

GRENVILLE A. J. COLE.

APPENDIX VII.

GEOLOGICAL SURVEY COLLECTIONS.

Under the care of Mr. T. Hallissy, the officer in charge of the collections, considerable progress was made with the re-labelling and arrangement of the older Palaeozoic fossils. By a new system of supporting pins, any specimen so mounted can be removed from its tablet for study and accurately replaced, and the risk of specimens falling from their tablets within the wall-cases is removed. Prof. T. Johnson, D.Sc., has published during the year several studies based on the fossil flora in the collections, and Mr. E. Newell Arber, M.A., has reported for the Survey on the Coal Measure plants from Ballycastle.

Additions have been made to the cases illustrating the road-metals in use in Ireland. A collection from the Interbasaltic zone (iron ores and bauxites) of N.E. Ireland has been exhibited as a special series. Specimens of the schistose rocks of the Scottish Highlands, presented by the Geological Survey of Scotland, have been arranged for comparison with those of Ireland.

GRENVILLE A. J. COLE,

Director of the Geological Survey of Ireland.

REPORT OF THE BOARD OF VISITORS

OF THE

NATIONAL MUSEUM OF SCIENCE AND ART, IRELAND,
AND THE ROYAL BOTANIC GARDENS, DUBLIN,*For the Year ending 31st March, 1912.*TO THE DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

The Board of Visitors submit the following as their Report for the year ending 31st March, 1912.

NATIONAL MUSEUM.

On the 13th April, 1912, the Visitors made their annual inspection of the Museum, at which the Director, Count Plunkett, was not able to be present, owing to illness.

Before considering the different divisions in detail they desire to make the following observations:

The Visitors notice with satisfaction that there has been a very marked increase in the attendance of the public. The number who passed through the turnstiles in 1911-1912 was 278,477, as against 270,381 in the previous year, showing an increase of 8,096. They are also pleased to observe that the number of serious students who make use of the Museum has increased considerably. This year the number recorded in the Natural History Division was 2,027, in the Botanical Division 321, and in the Art Division about 50 students attended, including students from the School of Art.; the number of special research students working in the Natural History Division is estimated at 600; making altogether 2,998 as against 1,110 last year. Here a very satisfactory increase of 1,888 is shown.

The Museum Bulletin is no longer published as part of the Department's Journal; it is published in pamphlet form as heretofore, but its production is altogether in the hands of the Museum Staff.

The Visitors are glad to learn that the Bulletin has been greatly appreciated by the Museums of America, Australia, and elsewhere.

The following Museum Guides, etc., have appeared during the year :—

- Part VI. Chapter I. Bronze and Brass (illustrated, new edition).
 " " " IV. Sheffield Plate and Pewter (illustrated, new edition).
 " " " V. Iron (illustrated, new edition).
 " " " IX. Glass (illustrated, new edition).

The Handbook, "Early Christian Art in Ireland," by Miss Stokes, originally published by the Board of Education, has been handed over to this Museum. A new edition was prepared by Count Plunkett, the Director, and is now published as one of the Museum Guides.

A catalogue of the Anglo-Irish Coins has been published.

A third edition (illustrated) of the Guide to Christian Antiquities has been issued during the year, and also of the Guide to the Irish Ethnographical Collections.

The Halfpenny Short Guide to the Museum is in its fiftieth edition.

The Visitors record with satisfaction that Miss Knowles was again given another opportunity, at the end of the year, of visiting the British Museum to consult Miss Lorrain Smith on a collection of Lichens which she has made and which she proposes to present to the Herbarium when it is complete.

The Visitors are glad to learn that Miss Knowles' long and valuable services to the Museum have received some recognition by an increase in her pay.

The Museum Lecture Theatre, which was opened last year, has again proved of great benefit, as the voluntary lectures given in it by the Museum Staff and others have been well attended by the public.

The following Lectures were delivered during the year :—

- | | |
|-----------------------|--|
| COUNT PLUNKETT | . "The Educational Value of Museums." |
| MR. M. S. D. WESTROPP | "Irish Glass." |
| MR. J. J. BUCKLEY | . "Irish Point Lace." |
| MR. E. KENT | . "Bagpipes." |
| MR. J. N. HALBERT | . "Useful and Injurious Insects." |
| PROFESSOR COLE | . "Leading Features in the Geography of Ireland.—A Study of the Raised Map." |
| MR. W. R. LANE JOYNT | "Postage Stamps." |
| PROFESSOR JOHNSON | . "The Flowering Plants of Ireland: Their Origin." |
| MR. C. M. SELBIE | . "Deep Sea Life." |
| MR. A. M'GOOGAN | . "Thomas Perry, an Eighteenth Century Irish Musical Instrument Maker." |

MR. J. B. S. MACILWAINE "Some Features of the British
Coinage.—Ancient British to
Elizabeth."

MR. A. J. TOPPIN . "Chinese Porcelain."

The average attendance at the course was \$2. The Visitors welcome this departure as an important one which should be of great utility by drawing public attention to the advantages which may be obtained from a serious study of the collections. These Lectures impose a considerable amount of extra labour on the members of the Staff, who are already fully occupied, and have therefore to prepare for, and deliver, the Lectures after official hours. The Visitors trust that, considering the usefulness of the object attained, the Department may be able to obtain for the Lecturers some extra remuneration.

The Visitors have again to call attention to the want of a proper office and workroom for the Keeper of Irish Antiquities, and they regret to find that no attention has been paid to their former recommendations. The room on the first floor which is now used as an office is urgently required for exhibition purposes. The Visitors, with the assistance of the late Sir Thomas Drew, submitted a scheme which could have been carried out at a moderate expense, and which would have attained the desired object.

They regret to learn that the proposed extension of the Museum has been further delayed by the suspension of building operations in Merrion Street.

They are glad to observe that the roof of the Temporary Annexé has been rendered staunch.

They observe with regret that nothing has been done to remedy the damp condition of the walls of some of the rooms, to which they drew attention in their last Report.

They also regret that nothing has been done to improve the lighting of Room V. in the Botanical Division, and that the platforms in Rooms III. and V. have not been erected.

Before making the recommendations in their last Report relative to these platforms the Visitors had a special report made on this matter by Mr. White laid before them, and consulted the Museum officers who daily use these rooms, and found that all agreed that the platforms would be a great convenience, but the Board of Works would not carry out this recommendation, and in their letter of December 5th, 1911, state "that in view of the very small dimensions of the windows in these rooms, it would not appear that any practical purpose would be served by the suggested platforms. Moreover, the Board are advised that the fitting up of a platform in Room V. would seriously affect the existing arrangements in the room and would interfere with the efficiency and convenience of the work carried on therein."

The Visitors are still of the opinion which they expressed in

their last two Reports that the Museum Attendant staff is too small to adequately protect the Collections, and to carry out the cleaning of the glass cases and dusting the large portion of the collections which are not in cases.

They are glad to learn that the Courtyard is to be relaid, and treated with "tarvia," which, they hope, will in some degree lessen the amount of dust, mud, and gravel carried into the Museum by the wind and on the feet of visitors.

They hope that a more suitable entrance gate and approach to the Natural History Museum from Merrion Square, as mentioned in former Reports, will soon be provided, and that the need for this has not been overlooked in preparing the plans for the new buildings of the Royal College of Science and Departmental Offices.

The Visitors feel again constrained to protest as strongly as possible against the retention of the old cattle sheds and the passage, Annexe Nos. I., II., III., IV. and V., being retained as a portion of the National Museum of Ireland. On several occasions these have been condemned in the strongest terms, and the urgent need of a new wing to complete the housing of the Natural History collections (including the Botanical Collections) has been pointed out. It is much to be feared that when at last the authorities awake and are forced to take the matter in hands, it may be found that the Royal College of Science buildings will have covered all the ground and that space no longer will be available for Museum extension, to the lasting injury of the National Collections.

ART AND INDUSTRIAL COLLECTIONS.

ART COLLECTIONS.

Rotunda.—The Visitors notice that the wheels of the State Carriage lent by Lord Darnley are in a very worm-eaten condition, and would suggest that expert opinion should be sought with a view to possible prevention of further damage from this source.

Room IV.—The cases containing Benares and other brassware are still awaiting re-arrangement. A notable addition to the exhibits in this section is a Persian Mirror Case painted with subjects showing Christian influence.

Rooms V. and VI.—No additions or alterations have been made in these rooms.

Room VII.—A considerable number of important additions have been made to the valuable collection of Musical Instruments during the past year. Notable among them are the following: A Chamber Orchestra, by Woffington of Dublin; a Zither by Claget and Gilson, also of Dublin; an Irish and a Lowland Scots set of Bagpipes; a Tonneau containing the drones of a French Musette, presented by Mr. William Ransome; a small Flageolet has been presented by Mr. H. Bantry White.

A glass Dulcimer, of about the end of the eighteenth century, is now on exhibition, and a rare instrument known as an Apollo Lyre has been added.

Some of the instruments appear to be suffering from the dampness of this room, and the Visitors consider that a trial might be made of some interior coating for the prevention of damp, or that some heat might be continuously supplied.

Room VIII.—The available space of this room has been greatly increased by filling up the gangway next the windows, and the exhibits of furniture are in process of re-arrangement. It would add very much to the appearance of exhibits in this section if a woman could be exclusively employed in carefully cleaning and polishing them.

Notable additions are a pair of fine Knife-boxes, a Court Cupboard, an interesting Bracket Clock, by G. Aicken, of Cork, and a Tea Caddy of Irish Yew.

Gallery of Central Court.—A few additions have been made to the collection of small objects. The Speaker's Robe, of the Irish House of Commons, which has been undergoing necessary repairs, is now on view. An Italian uniform which belonged to John Hogan the sculptor, has been acquired. A second exhibit of embroideries has been lent by Mr. Talbot Hughes. A seventeenth century Italian cope has been added.

Some fans have been added, and the coins of England have been arranged. It seems a pity that the collection of Irish Coins in this section should not be more complete, and the Visitors would suggest that if there are any Irish coins exhibited in other sections that the whole collection should be amalgamated.

Upper Gallery.—Several Miniatures have been added, and Miss Crawford has lent an interesting collection of Daguerrotypes. In the section devoted to Lace, which has now become of great importance, there is a valuable addition in the shape of a Tabernacle Veil, with figures, from Kenmare.

The Bronze and Iron Section shows no addition of importance.

Rotunda Gallery.—The Visitors notice with great satisfaction the introduction of Bracket Electric Lights in this Gallery to supplement the central light. A fine Dublin Cake-Basket of 1769, an early Spoon by Joseph Stoker, a Cork Teapot, and an Irish Chalice and Paten of 1701, have been added to the collection.

Room VIII.—Excellent progress is being made in the re-arrangement of the Porcelain and Pottery, consequent on the absorption of the Longfield Collection. The public is indebted to the Misses Newton for a Loan Collection of figures, principally Chelsea. Some specimens of Glass, and a fine faience Lion have also been acquired.

Catalogues.—Those dealing with Bronze and Brass, and with Sheffield Plate and Pewter, have recently been published, and Mr. Westropp has re-written that dealing with Glass.

ETHNOGRAPHICAL COLLECTION.

There are no acquisitions since last year, but the Visitors report with pleasure that one long show-case has been put along the wall opposite the windows to take the place of the separate cases that were there. This gives considerably more space to show the collections which are at present being re-arranged. The Visitors regret, however, that their advice was not followed by removing the pilasters and thereby gaining ten inches in depth throughout the whole length of the case which would have enabled Mr. Buckley to have shown the valuable collection of spears from the South Sea Islands to better advantage than is now possible. The African objects are still crowded or have to be stored, and it is proposed that some of the Chinese and Japanese objects be moved to a different section to make room for these.

EGYPTIAN COLLECTION.

The Visitors have to record with great pleasure a very valuable acquisition from the British School of Archæology. This is a mummy of the Roman period 100-250 A.D., with a life-size portrait head, painted in some sort of wax medium probably, a fine piece of work.

There is also a smaller and somewhat similar painting, probably in tempera, a valuable addition to the collection, and some fragments of woven fabrics. Mr. P. de Rustafjaell has lent some very early paintings on cloth, which in his book, "*The Light of Egypt*," he claims to be the origin of painting on cloth.

GREEK AND ROMAN ANTIQUITIES.

To this collection has been added a small collection of Early Minoan Pottery, a gift, through Professor Browne, from the University College Museum, to take the place of the larger collection lent last year by that body, which this year lends a most important Gypsum Stone Jar from Crete, of about 1350 B.C., with well-defined spiral ornamentation; a most valuable loan.

In this room also is an interesting fragment of Pompeian Fresco, lent by Mr. P. de Rustafjaell.

The Visitors still hope that it may be possible to make a re-arrangement of the casts such as they suggested in their Report of last year, by which the fine exhibition space in the large Annexe might be utilised to greater advantage, and the casts be more available for educational purposes.

INDUSTRIAL COLLECTIONS.

They have nothing to add to their Report of last year. This Collection appears to stand exactly as it was twelve months ago.

CIRCULATION COLLECTIONS.

They are pleased to observe that the decrease in the use of these Collections, noted in the two former years' Reports, has not continued, and that the past year shows a substantial increase.

The number of cases issued during the year was 632, being 160 in excess of the previous year.

Three new cases have been added during the past year containing examples of the industrial products of Japan, Manchuria, and India, and specimens presented by the Royal Botanic Gardens at Kew.

IRISH ANTIQUITIES.

The objects registered since March, 1911, amounted to 238. Of these 24 stone celts from County Fermanagh (presented by Mr. Thomas Plunkett), a winged bronze celt, found at Clondalkin, Co. Dublin, and a golden disc, said to have been found at Armagh, are to be noted. In Room II. are a number of stone celts from the Shannon fords (presented by Mr. T. P. S. Crosthwaite), a valuable addition to those found in the same river (presented by the Shannon Commissioners), with which they are exhibited.

In Room III. the objects discovered in the Carrowkeel Cairns, Co. Sligo, by Messrs. Armstrong, Praeger, and Professor Macalister, are now exhibited, including pottery of the Bronze Age, which has been judiciously repaired. A set of casts from the stone moulds for casting spears, found near Omagh, six strings of amber beads, probably also of the Bronze Age, and four golden lunulæ, purchased by the Royal Irish Academy, are now exhibited. The Carrowkeel objects have been lent by Mr. R. S. Gardiner and the Misses Ffolliott.

The collection of Irish medals belonging to the Royal Irish Academy (a fine series) are being arranged, the collection of coins being now in good order. Four important specimens of tradesmen's tokens, of the sixteenth century, have been added to the Collection.

In the same room is a collection presented by Dr. G. Munro of prehistoric Japanese antiquities, in addition to his former gift of similar objects.

The Crypt has now been fully arranged and is opened to the public; the chief contents being the carvings from the Bridge of Athlone, casts of crosses, the canoes, and quern stones. In the southern wing of the Crypt the collection of the Royal Society of Antiquaries of Ireland (till recently at Kilkenny, and lent to the Museum by the Society) are now arranged and exhibited. On the walls are hung framed grants of arms, documents and charters, and a banner, from a trumpet of the Life Guards, dating from the reign of Queen Anne. Swords, pins, clasps, horse furniture, and bits, stone moulds for celts,

spears, etc. (including a remarkable one, with four moulds, one in each of its faces); stone celts and flint implements are in the part near the windows. In the cases against the pillars are placed urns and human remains, stone lamps, a fine bell of iron dipped in bronze, from Foulkecourt, Kilkenny; smaller bells, rushlight holders, coloured glass from the windows of St. Canice's Cathedral, Kilkenny, and stone inkstands. The oghams, found in the Dunbel raths, in the same county, and broken by the country people, have been repaired and are exhibited. These Dunbel finds are of special interest, showing the great age and long occupations of the forts. The wall cases and shelves contain a number of carved fragments and gargoyles, with amber and other beads and crannog finds. The collections from the crannogs of Ballydoolough, Lough Eyes, and Drumgay, with the Ardnakue midden, form an important addition to the crannog finds in Room III. Most of these objects have been described and many illustrated in the Journals of the Society, under its various titles.

Mr. George Coffey, the Keeper, has revised and republished the Guide to the Irish Coins in the Collection of the Royal Irish Academy. A cheap edition has been issued at threepence, which can be obtained in the Museum, and is very helpful to students and collectors. Mr. Coffey's book on New Grange and other Tumuli with incised stones in Ireland, has been published, giving full information on the stones of which casts are exhibited in Room III. at the end near Room II.

Mr. Coffey's former monograph on the Tumuli of the Boyne Valley, in the Transactions of the Royal Irish Academy, has been long since out of print.

ZOOLOGY.

During the last year a good beginning has been made in arranging and cataloguing the fine collection of bird skins which are stored in the reserved portion of the Upper Gallery. This important work will occupy a considerable portion of the time of the staff during the next few years.

Several important and interesting specimens have been added to the collections during the year; these include a fine Gharial, the gift of the Hon. R. T. Greer, I.C.S.; a Tarpon, presented by Rowland Ward, Esq.; and an Irish Wolf Hound, given by Pierce O'Mahony, Esq. The latter is regarded as a typical example of the ancient Wolf Hound of Ireland, which has almost become extinct. A fine specimen of the extremely rare Chinese Bear has been secured by purchase, and also two large Gorillas. A beautiful case, illustrating groups of young and adult Coots and Grebe in their natural habitat, has been placed in the section devoted to the animals of Ireland.

It is gratifying to note that the small reading-room is much appreciated, and that it attracts an increasing number of students.

The ceiling and upper parts of the walls in the Main Room on the ground floor are still in the dirty condition noticed in a former Report. If they were painted white the lighting of the collection of Irish animals would be much improved.

Practically no progress has been made in providing cases for the new underground accommodation for specimens not usually exhibited to the public. The Visitors urge that the new presses and new cases should be supplied without delay, so that the arrangement of the specimens may be proceeded with by the Museum Staff.

BOTANY.

The chief work of the Staff during the year has been concerned with the classification, mounting, and arrangement of the fine collection of Irish Lichens obtained by the Clare Island Survey organised by the Royal Irish Academy. This has been a most laborious undertaking.

The fossil Irish ferns, from the coal measures, have been arranged and displayed in an attractive manner.

It is a grave misfortune that the Rooms allotted to Botany are so unsuitable in every way, and that the specimens are placed in the midst of the Art Collections—far away from the main Natural History Museum. In their last Report the Visitors drew marked attention to the many disadvantages under which those in charge of the Botanical Collections have to work, and pointed out the extreme importance of providing space for the Collections close to those of Zoology and Geology.

GEOLOGY AND MINERALOGY.

Some of the fossils belonging to the Geological Survey have been rearranged, and specimens of Irish Coal have been placed in a prominent position in the Curved Gallery.

A case for recent additions to the Museum has been provided.

ROYAL BOTANIC GARDENS.

The Visitors inspected the Royal Botanic Gardens on April 13th, and have pleasure in reporting that they again found them in excellent condition.

The number of visitors to the Gardens during the year ending 31st March, 1912, was 445,462, as against 404,152 for the previous twelve months.

Many useful improvements have been carried out during the year, and some of the suggestions made by the Visitors in their recent Reports have been fully acted upon.

Among these the Visitors note that:—

The yard for Alpine plants has been put in excellent condition, and the new pits recently provided are quite satisfactory.

The roofs of Houses 1 to 9 are now all in good repair, and the Houses have been painted inside and out.

The Camelia House has been provided with new roller blinds.

The paths in the Orchid House have been much improved by the laying down of drains.

The walls of the Fern House have been underpinned and strengthened, and in many cases throughout the Houses new down-pipes and a more accessible system of gutters have been arranged.

The case of Killarney and other filmy Ferns has been considerably enlarged, and it is now possible to exhibit to the public a greater number of specimens of this interesting group.

The condition and display of the specimens in the Orchid House and in the large Palm House excites the highest admiration, and it does not seem possible to effect further improvements without increased accommodation.

Much useful work has been done in extending the water supply to the rock work and other parts of the grounds, and the well-planned system of drains which have been laid down for some of the walks will add much to the comfort of visitors.

The extension of the beautiful Rock Garden is being continued.

The upper yard has been put in proper repair.

Very satisfactory earth closets have been provided within the grounds for the use of the public.

It is gratifying to learn that the Keeper has been able to give valuable assistance to many educational institutions by supplying specimens for teaching and study. The importance of this work may, in part, be judged by the fact that during the past year 35,000 specimens or groups of specimens have been supplied by the Gardens for purposes of study.

Since the last Report a valuable collection of botanical works, the property of the late Mr. Gumbleton, of Co. Cork, has, under his will, been presented to the Gardens. Among these books are many of great rarity, and the value of the entire collection can hardly be less than £700. It is essential that suitable storage should be provided for the collection without delay, and the Visitors recommend for its reception an immediate extension of the existing Library. In the meanwhile the books are undoubtedly exposed to risk of damage.

The Visitors note that no change has been made in the miserable shelter provided for flower-pots in the upper yard, and recognise that want of suitable protection must lead to much loss from breakage.

New pits for Orchids are still badly needed, and propagating houses—as suggested in a former Report—should be provided to enable the Gardens to maintain their well-deserved reputation.

The Visitors recommend that baths should be provided for the families of married men resident on the grounds.

The Visitors desire to urge the Department to use their entire

influence to obtain the scheme of improvements outlined in their Report for the year 1910. So far no advance has been made, and the Visitors urge that :—

(1) An attractive Refreshment Room should be built inside the gates. The existing cottage outside the grounds is quite unsuitable, and the Visitors note that it has not yet been opened this year, to the great inconvenience of the public.

(2) Sheds for the protection of carts and large implements should be provided. These garden requisites should not be left in the open exposed to all weathers.

(3) A cycle shed is urgently needed.

(4) New quarters for men improvers are absolutely essential ; at present eight men have to sleep in two small rooms, each less than fourteen feetsquare. Isolation, in cases of illness, is of course quite impossible, and the Visitors have therefore learnt with no surprise that during last winter, at one time, all four inhabitants of one of these rooms were ill together with severe influenza. The existing conditions should not be tolerated for a moment by a Government institution.

In order to remedy the serious defects indicated above, the Visitors again recommend the scheme which was drawn up with great care and after much thought, for the Report for the year 1910.

The Visitors venture to hope that the Department will be able to find some means to have the recommendations attended to, and the suggested changes inaugurated during this year.

5th June, 1912.

D. H. MADDEN,
President.

REPORT

OF THE

COUNCIL OF TRUSTEES

OF THE

NATIONAL LIBRARY OF IRELAND

For the Year 1911-12

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND

SIR

As Chairman of the Council of Trustees, I have the honour to submit the Report for the year ending March 31st, 1912.

The Library was open on 281 days. The attendances of readers numbered 196,748. This total is less than that of 1910-11 by 11,753, but the working year in 1910-1911 was seven days longer than in 1911-12, an Easter Recess, the King's visit to Dublin, and Coronation Day having been included in the latter year. The average of daily attendances during 1911-12 was 702, the highest on record except that of 1910-11.*

Attendances morning (10 to 6)	..	138,172
Attendances evening (6 to 10)	..	58,576
		<hr/>
		196,748

The volumes catalogued and made accessible to readers were 4,865, of which 479 were folio, 612 quarto, and 3,774 octavo and smaller sizes. A table classifying these works by subject will be found in Appendix I., where also will be found statistics of book-binding, of borrowing by certain members of the Royal Dublin Society, and by certain officers of the Science and Art Institutions, besides lists of donors, and particulars as to donations.

It is now several years since the Trustees commented on the really remarkable numbers of the readers' attendances in this Library of serious reference and study. They have pleasure in pointing out the steady maintenance of a high standard during

* Cf. statistical table in Appendix I.

the past decade, and in doing so introduce here in the body of their Report a short extract from the Statistical Appendix:—

YEAR	TOTAL ATTENDANCES	DAILY AVERAGE *
1901-2,	150,780	518
1902-3,	174,786	588
1903-4,	181,385	619
1904-5,	198,274	677
1905-6,	193,462	658
1906-7,	178,974	619
1907-8,	190,657	646
1908-9,	188,596	673
1909-10,	189,266	668
1910-11,	208,501	724
1911-12,	196,748	702

The paragraph which follows further emphasises the importance of these statistics.

Since the Council of Trustees first met, early in 1878, thirty-four years ago, up to the close of March, 1912, the volumes actually catalogued, classified and shelved, so as to form an addition to the working collection, number 103,500. The last ten years, since March 31st, 1902, have seen the addition of nearly half of these, viz., 48,900, the prior twenty-four years accounting for 54,600. The Trustees, a few years since, drew attention to the augmentation in the *rate* at which the Library grows. They desire also to lay stress on the considerable value, rarity, and excellence of the collection under their care, and to point out what a great responsibility, in custodianship and active administration, is implied by the combination of these facts with such a large and increasing public resort to the Library.

In Appendix I. will be found a list of the numerous donors, with particulars of some of the more notable gifts. Here the Trustees desire to record their sense of the gracious act of Her Majesty Queen Alexandra in presenting a copy of *The Arms and Armour at Sandringham*, being an account, sumptuously illustrated, of the remarkable Collection presented to His Majesty Edward VII., on the occasion of his visit to India, 1875-6; and further to call attention to Mr. Pierpont Morgan's gift of Catalogues of the *Pierpont Morgan Collections of Miniatures, Jewels, and Precious Works of Art*, compiled at his request by G. C. Williamson, Litt.D.

The Author and Title Catalogue of books acquired in 1908 was issued in October, 1911. Proof sheets of the Catalogue

* It should be premised that the Daily Averages do not vary precisely with the Total Attendances, since the incidence of Easter slightly shortens some working years, slightly lengthens others.

for 1909 are being received. The Catalogues for 1910 and for 1911, in one alphabet, are being prepared for the Press.

In November, 1911, appeared the Subject-Index to the books catalogued during the ten years 1894-1903. To the preparation and printing of this Index reference has been made in former Reports, and the Trustees believe that it will be of much service to readers. The titles for a similar Index to the acquisitions of 1904-10 have been arranged during the past few years into one alphabet, and with them has been incorporated a minute Subject-Index to the large collection of bound Pamphlets. This Index is being enlarged also by addition of all the subject titles written some years ago by the Cataloguers employed on the older acquisitions of the Library, previously catalogued unsatisfactorily. Further particulars in the Librarian's Report appended.

During the year much progress has been made in repairing, arranging and binding the large series of miscellaneous maps possessed by the Library. These maps, on account of their widely varying range of size and shape, presented special difficulties as regards preservation, binding and storage. See further particulars in the Librarian's Report.

No noteworthy structural increase of accommodation has been gained during the past year; but the Trustees have lately had the pleasure of receiving an intimation that the Board of Works, in the present financial year, purpose to carry out one of the valuable internal improvements pressed upon the attention of the Board during some time past, viz., the continuation of the shelving to the upper walls of the Architecture Room, and the fitting-up of a light service gallery by which this shelving will be rendered accessible.

The Trustees are gratified to note that the Board of Works included in their draft estimates two matters which the Trustees had stated to be of great importance, viz., the conversion of the hydraulic lift into an electric lift, and the provision of a large press in the Delivery Room,—though owing to financial pressure these items were finally excluded by the Treasury.

The Trustees are also gratified to become aware that the Board of Works has lately devised a method of approaching the Attic Room in the East Wing by which excessive expenditure on construction can be avoided. As the Trustees state in Appendix II. to their Report for 1905-6, "this apartment is large and well-lighted, and peculiarly adapted for the safe and orderly storage of books."

The increase in book accommodation which will be gained by the improvements above described is most valuable—still the Trustees think it needful in this context to repeat words used by them not long ago, and to advise the Department that "the natural growth of the collections will necessitate, before

many years, the completion of the Library Building, in accordance with its original plan."

At their Meeting on January 26th, 1912, the Council of Trustees received from the Department official notification of the retirement of Mr. H. Bantry White, I.S.O., the Chief Clerk and Second Officer of the Science and Art Institutions, and of the assignment of the duty of attending the Meetings of the Council and acting as their Secretary to Mr. C. W. Steele.

The Trustees desire to express their grateful sense of the valuable service rendered to the Library by Mr. White during his term of office.

By authority of the Trustees the Annual Conference of the Library Association, held at Perth in the week beginning September 4th, 1911, was attended by the Librarian.

The Trustees submit the Annual Report of the Librarian, which deals with certain sections of the internal administration of the Library in greater detail.

May 10th, 1912.

T. A. FINLAY,
Chairman

APPENDIX] I.

STATISTICS AND LISTS

Subjoined is a statement of the total attendances of readers and the daily average since the Library was founded in 1877 :—

YEAR	ATTEND- ANCE	DAILY AVERAGE
1878 First complete year of Library,	27,452	99
1889 Latest year in Leinster House,	51,325	174
1893 First reliable record after transfer, 1890, to present building,	113,888	388
1894,	119,500	404
1895,	125,500	427
1896,	136,365	462
1897,	137,832	470
1898,	142,218	486
1899,	154,878	529
1900,	148,405	506
1901 (January—March),	40,763	536
1901-1902,	150,780	518
1902-1903,	174,786	588
1903-1904,	181,385	619
1904-1905,	198,274	677
1905-1906,	193,462	658
1906-1907,	178,974	619
1907-1908,	190,657	646
1908-1909,	188,596	673
1909-1910,	189,266	668
1910-1911,	208,501	724
1911-1912,	196,748	702

STATISTICS OF BOOKS "CATALOGUED AND MADE ACCESSIBLE TO
READERS" SINCE JANUARY, 1895

YEAR	VOLUMES
1895,	2,451
1896,	2,363
1897,	2,802
1898,	2,775
1899,	3,360
1900,	3,185
1901 (January—March),	826
1901-2,	3,620
1902-3,	3,635
1903-4,	4,209
1904-5,	6,365
1905-6,	5,563
1906-7,	3,946
1907-8,	4,817
1908-9,	4,408
1909-10,	5,970
1910-11,	5,142
1911-12,	4,865

The volumes added to the Library and made accessible to readers during the year 1911-12 may be grouped as follows :—

Bibliography, Library Economy, Book Rarities, and Cyclopædic works,	191
Newspapers, General Periodicals,	279
Philosophy,	56
Religion, Theology, Ecclesiastical History,	355

Sociology, Statistics, Political Science,	53
Political Economy,	118
Law,	70
Parliamentary Papers,	166
Administration,	145
Associations,	5
Education,	166
Commerce,	27
Amusements, Customs and Manners,	58
Philology,	90
General Science,	49
Mathematics,	25
Astronomy,	37
Physics, Light, Heat, Electricity,	53
Chemistry,	49
Geology,	72
Paleontology,	3
Biology, Anthropology, &c.,	52
Botany,	65
Zoology,	114
Useful Arts in General,	12
Patent Office Publications,	184
Medicine,	207
Engineering,	70
Agriculture,	516
Domestic Economy,	9
Communication, Commerce, Railway Guides, &c.,	54
Chemical Arts, Manufactures, and Trades,	62
Fine Arts in General,	50
Landscape Gardening,	6
Architecture,	28
Sculpture,	41
Drawing and Design,	21
Painting,	18
Engraving,	6
Photography,	3
Music,	19
Archæology,	58
General Literature,	14
English Literature (Essays, Poetry, Periodicals, &c.),	260
German,	42
French,	61
Italian,	27
Spanish,	4
Latin,	18
Greek,	18
Irish,	13
Other Literatures,	11
General History,	16
Geography and Travel,	233
Biography, Genealogy, Heraldry, &c.,	250
Ancient History,	14
History of Europe,	182
" " Asia,	10
" " Africa,	15
" " America	15
Total,	4,865

Subjoined is the return as to binding done for the Library during 1911:—

In the binder's hands, Dec. 31st, 1910, ..	..	960 vols.
Sent to the binder during 1911 ..	..	4,500 „
		<hr/> 5,460 „
Returned by binder during 1911, ..	..	4,480 „
		<hr/> 980 „
In the binder's hands, Dec. 31st, 1911, ..	..	980 „

Subjoined is the account of books borrowed from the Library during twelve months ending March 31, 1912, by members of the Royal Dublin Society, and by certain officers of the Institutions of Science and Art:—

In borrowers' hands, March 31st, 1911, ..	..	92
Lent between April 1, 1911, and March 31, 1912, to members of the Royal Dublin Society, ..	..	538
Lent to officers of the Institutions of Science and Art, ..	..	330
		<hr/> 960
Returned during the twelve months, ..	..	892
		<hr/> 68
In borrowers' hands, March 31st, 1912, ..	..	68
		<hr/> 32
With members of the Royal Dublin Society, ..	..	36
With officers of the Institutions of Science and Art, ..	..	36
		<hr/> 68

The number of members of the Royal Dublin Society entitled to borrow, according to the last official list published by the Society, is 290.

The following are some of the more noteworthy special gifts received during the year:—

Her Majesty Queen ALEXANDRA.—*The Arms and Armour at Sandringham*, the Collection presented to His Majesty King Edward VII. on the occasion of his visit to India, 1875–1876.

Frau Prof. Ludw. Chr. STERN, Berlin, per Professor Kuno Meyer.—The Manuscript of the text and Glossary of Merriman's *Cúirt an Mheadhóin Oidhke*, prepared by her late husband, Ludwig Chr. Stern.

Mr. J. Pierpont MORGAN.—*Catalogue of the Collection of Miniatures*, the property of J. Pierpont Morgan, compiled by G. C. Williamson, Litt.D., 4 vols, 1906–08; *Catalogue of the Collection of Jewels and precious works of Art*, the property of J. Pierpont Morgan, compiled by G. C. Williamson, Litt.D., 1910.

The Administration of the BIBLIOTHÈQUE ROYALE, BRUSSELS.—*Catalogue des Manuscrits de la Bibliothèque Royale de Belgique*, 9 vols., 1901–09.

STATISTICAL AND SOCIAL ENQUIRY SOCIETY OF IRELAND.—A large number of journals, periodicals, and annuals.

Mr. E. R. McClintock DIX.—A large collection of Books printed in Dublin during the Seventeenth Century, and other volumes.

Mrs. J. R. GREEN.—*Journal of the African Society*, 41 numbers, October, 1901–1911.

Mr. M. J. RYAN.—Walpole's *Il Castello di Otranto*. Storia Gotica. Londra, 1795.

Professor C. H. OLDHAM.—Eason's *Almanack for Ireland*, 1874–1897 *Belfast Directory*, 1906.

Rev. C. T. MCCREADY.—*Journal of the General Synod of the Church of Ireland*, 1897–1911, etc.

Miss HUTTON, Wyckham, Dundrum.—Six volumes of *Newspaper Cuttings of Art Sales* from 1895–1908; *Athenæum*, 26 vols., 1897–1910.

Mr. P. J. O'REILLY.—*Annales Archéologiques*. par Didron aîné, 25 vols., Paris, 1844–68; Bruin's *Reizen over Moscovie door Persie en Indie*, 1714; Dring's *Catalogue of the lords, knights, and gentlemen that have compounded for their estates*, 4to, n.p., n.d.; Birmingham's *Social State of Great Britain and Ireland*; Royal Dublin Society's *Librarian's Returns*, 1849–1856, etc.

Mr. J. W. GUNNIS, Longford.—Wilson's *Plan of the City of Dublin*, 1793; Watson's *Citizen's and Gentleman's Almanack*, 28 vols., 1801–1834.

Mrs. Ethel STOKES.—*The British Numismatic Journal*, Vols. 1–2, 5–7, 1904–1910, etc.

Dr. W. R. DAWSON, Finglas.—Upwards of one hundred volumes relating to general literature, history, and travel, including: Gray's *Natural arrangement of British Plants*, 2 vols., 1821; *Dublin Medical Journal*, vol. I–XVI, 1832–40; Norvin's *Histoire de Napoléon*, 2 vols., 1839; *Pamphlets on Irish Affairs* (10), 1780, etc.; Martin's *Magazine* (of Natural and Civil History), 2 vols., 1755–8; Crichton and Wheaton: *Scandinavia*, 2 vols., 1838; Russell's *Barbary States*, 2nd ed., 1835; Murray's *China*, 3 vols., 3rd ed., 1843; *Les délices de la Hollande*, Amsterdam, 1678; Medland and Weobly's *Remarkable Trials*, 2 vols., 1803; La Force's *Voyage de France*, 2 vols., 1780; M. L. R.'s *Curios de Paris*, 2 vols., 1733; Franklin's *Modern Voyages of Discovery*, 4 vols., 1829; Denham's *Modern Voyages of Discovery*, 2 vols., 1831; Harris's *Life of King William*, 1747.

The late Mr. Abraham SHACKLETON.—*The Christian Remembrancer*, 44 vols., 1844–1865; Cardinal Newman's *Apologia pro vita sua*, Longman, 1864; Watson's *Philip the Second*, 2 vols., 1777; Southey's *Life of Wesley*, 2 vols., 1846; and several other works.

Mr. Henry HARDEN, LL.B.—*Forestiero illuminato di Venezia*, 1784; Abulfeida's *Descriptio Aegypti. Arabice et Latine*, Goettingue, 1776.

A list is subjoined of the names of persons from whom gifts have been received between April 1, 1911, and March 31, 1912:—

Her Majesty Queen Alexandra.
Arcowski, Henryk.
Axon, W. E. A., LL.D.
Ballinger, John, M.A.
Best, R. L.
Bigger, F. J.
Blake, Martin J.
Boyd, Rev. S. T.
Byrne, Matthew J.
Garpenter, G. H., D.Sc.

Carrick, The Countess of.
Croke, J. O'Byrne.
Cross, Tom P., Ph.D.
Cruise, The late Sir Francis.
Cullen, Joaquim M.
Caesirer, Bruno, Berlin.
Cole, Prof. Grenville A. J.
Coleman, Rev. A., O.P.
Correra, Luigi.
Coventry, Bernard

- Crofton, Henry C.
 Dawson, Dr. W. R.
 De Burgh, Alfred C., M.A.
 Descours, Paul.
 Devins, M.
 Edmondston, Gabriel.
 Esposito, Mario.
 Fairbrother, Miss E. H.
 Farran, G. P.
 Fisk, William, L.D.S.
 Foley, Richard.
 Getz, J. L. Theodore.
 Gunnis, J. W.
 Haggard, W. N.
 Harden, Henry, LL.B.
 Haslam, Mrs.
 Hodges, Figgis & Co., Ltd.
 Holt, E. W. L.
 Hutton, Miss.
 Jackson, J. Wilfrid.
 Jenner, Thomas.
 Kelly, T. Alings.
 Lawrence, F. Pethick.
 Lennox, P. J.
 Lyster, T. W., M.A.
 Macartney-Filigate, W. T.
 M'Cready, Rev. C. T.
 MacDonald & Co.
 MacGrath, Sir Joseph.
 MacIlwaine, J. B. S., R.H.A.
 M'Kenna, Philip.
 MacMurdo, Miss Phyllis.
 Martyn, Edward.
 Maxwell, Miss C.
 Meyer, Prof. Kuno, Litt.D.
 Meyers, Friedrich.
 Moore, Rev. H. Kingsmill.
 Morgan, J. Pierpont.
 Neil, J. C.
 Newbigging, Thomas.
 Oldham, Prof. C. H.
 O'Neill, J. G.
 O'Reilly, P. J.
 Pontich, Emile.
 Praeger, R. Lloyd, B.E.
 Pullen, G.
 Rappaport, C. E., Rome.
 Reid, Rt. Hon. Sir George.
 Rendell, Rev. J. R.
 Robinson, S. L.
 Ryan, M. J.
 Scharff, R. F., Ph.D.
 Schumm, Felix.
 Scott, J. A., M.D.
 Searle, W. Townley.
 Sell's World's Press.
 Shaw, Thomas J.
 Sirr, Harry.
 Smith, Walter G., M.D.
 Stokes, Miss Ethel.
 Stubbs' Publishing Co., Ltd
 Testimony Publishing Co.
 Thompson, John, M.A.
 Townshend, T. C.
 Webb, Miss Josephine.
 Welch, R.
 Westropp, Thomas J.
 Wilson, Alec G.

Gifts have been received between April 1, 1911, and March 31, 1912, from the following Public Departments, Public Bodies, Public Institutions, and Learned or Literary Societies :—

- His Majesty's Stationery Office.
 Lords Commissioners of H.M. Treasury.
 Lords Commissioners, Admiralty.
 British Museum.
 Board of Trade.
 Patent Office.
 Foreign Office.
 War Office.
 Office of the Registrar-General of Scotland.
 Astronomer Royal, Greenwich.
 " " Scotland.
 Ordnance Survey of England and Wales.
 " " " Ireland.
 Geological Survey of Great Britain.
 " " " Ireland.
 " " " Scotland.
 " " " Canada.
 " " " India.
 " " " United States of America.
 " " " South Africa.
 Transvaal Mines Department, Pretoria.
 India Office, Whitehall.

Royal Sanitary Institute.
 Royal Astronomical Society, London.
 Royal Institute of British Architects, London.
 Institute of Actuaries, London.
 Society of Accountants and Auditors, London.
 Chemical Society, London.
 Society of Chemical Industry, London.
 Society of Arts, London.
 Australian Museum, Sydney.
 Palestine Exploration Fund.
 Free Trade Union.
 Tariff Reform League.
 Indian National Congress.
 Research Defence Society, London.
 Hungarian Ornithological Society, Budapest.
 Boston Museum of Fine Arts.
 United States National Museum.
 National Museum of Wales.
 Manchester Museum.
 Belfast Naturalists' Field Club.
 Belfast Natural History and Philosophical Society.
 Irish Agricultural Organization Association.
 Irish Landowners' Convention.
 Royal Botanic Gardens, Glasnevin.
 Dublin Fire Brigade, per T. P. Purcell.
 Irish Unionist Alliance.
 Unionist Association of Ireland.
 Irish Central Bureau for the Employment of Women.
 City of Dublin Technical Schools.
 Municipal Technical Institute, Belfast.
 Theosophical Society, London.
 Methodist Missionary Society, London.
 Zoological Society, London.
 Royal Zoological Society, Ireland.
 Incorporated Law Society, Ireland.
 College Historical Society, Dublin.
 Statistical and Social Inquiry Society of Ireland.
 Belfast Municipal Art Gallery and Museum.
 Warrington Municipal Museum.
 Walker Art Gallery, Liverpool.
 Battersea Public Libraries.
 Bibliothèque Royale, Brussels.
 Birmingham Free Libraries.
 Bristol Public Library.
 Buckingham Palace Road Public Library.
 Boston Public Library.
 St. Helen's Public Library.
 Aston Manor Free Library.
 Imperial Library, Calcutta.
 Bodleian Library, Oxford.
 Cambridge University Library.
 Cardiff Public Library.
 Library of Congress, U.S.A.
 New York State Library.
 Harvard University Library.
 Coventry Public Library.
 John Creran Library, Chicago.
 St. Andrews University Library.
 St. Louis Public Library.
 Indianapolis Public Library.
 Library Co. of Philadelphia.
 John Rylands Library, Manchester.

Manchester Public Library, King St.
 Milwaukee Public Library.
 New South Wales Public Library.
 Toronto Public Library.
 National Library of Wales.
 Nottingham Public Library.
 Patent Office Library.
 Sunderland Publ. Library, Museum and Art Gallery.
 Reading Public Library.
 Bibliotheca Nacional, Habana.
 Worthington Borough Library.
 Wigan Public Library.
 Girton College, Cambridge.
 Newnham College, Cambridge.
 Alexandra College, Dublin.
 King's College, London.
 Royal Holloway College.
 Clongowes Wood College.
 Maynooth College, League of St. Columba.
 Royal College of Science, Dublin.
 Trinity College, Dublin: The Board.
 National University of Ireland.
 Royal College of Physicians, Ireland.
 Queen's University of Belfast.
 University College, Cork.
 University College, Dublin.
 University College, Galway.
 University of Wales.
 University of Sheffield.
 University of Leeds.
 University of Liverpool.
 University of Manchester.
 University of Birmingham.
 University of Cambridge.
 University of London.
 University College, London.
 St. Andrews University.
 Edinburgh University.
 Glasgow University.
 Aberdeen University.
 Leland Stanford University, California.
 Harvard University.
 New York University.
 Yale University.
 Princeton University.
 Cornell University.
 University of Illinois.
 Chicago University.
 Catholic University, Washington.
 Carnegie Foundation for the Advancement of Teaching.
 College of Preceptors, London.
 Melbourne University.
 Dartmouth College, N.H.
 University of the Cape of Good Hope.
 Sydney University.
 Johns Hopkins University.
 Imperial University, Kyoto, Japan.
 " " Tohoku, Sendai, Japan.
 " " College of Science and Engineering.

The following Irish Newspapers, presented during the year 1911, are filed for reference when bound :—

<i>Anglo-Celt</i> (Cavan).	<i>Irish Weekly Mail</i> .
<i>Armagh Guardian</i> .	<i>Kerry Evening Post</i> .
<i>Ballymena Weekly Telegraph</i> .	<i>Kildare Observer</i> (Naas).
<i>Ballymoney Free Press</i> .	<i>Kilkenny Journal</i> .
<i>Bonbridge Chronicle</i> .	<i>Kilkenny Moderator</i> .
<i>Belfast News-Letter</i> .	<i>Larne Times</i> .
<i>Bray and South Dublin Herald</i> .	<i>Leinster Express</i> (Maryborough).
<i>Carrickfergus Advertiser</i> .	<i>Leinster Leader</i> (Naas).
<i>Clare Journal</i> (Ennis).	<i>Limerick Chronicle</i> .
<i>Coleraine Chronicle</i> .	<i>Limerick Leader</i> .
<i>Cork Free Press</i> .	<i>Lisburn Herald</i> .
<i>Cork Constitution</i> .	<i>Lurgan Mail</i> .
<i>Cork Examiner</i> .	<i>Meath Chronicle</i> (Kells).
<i>Cork County Eagle</i> (Skibbereen).	<i>Mid-Ulster Mail</i> (Cookstown).
<i>Derry Standard</i> .	<i>Nationalist, The</i> (Carlow).
<i>Donegal Vindicator</i> (Ballyshannon).	<i>Nationalist, The</i> (Clonmel).
<i>Dublin Saturday Post</i> .	<i>New Ross Standard</i> .
<i>Dundalk Democrat</i> .	<i>Northern Constitution</i> (Coleraine).
<i>Dungannon News</i> .	<i>Northern Whig</i> (Belfast).
<i>East Galway Democrat</i> .	<i>Portadown News</i> .
<i>Echo, The</i> (Enniscorthy).	<i>Roscommon Messenger</i> .
<i>Enniscorthy Guardian</i> .	<i>Saturday Record</i> (Ennis).
<i>Evening Herald</i> (Dublin).	<i>Sinn Féin</i> .
<i>Evening Telegraph</i> (Dublin).	<i>Sligo Champion</i> .
<i>Freeman's Journal</i> .	<i>Sligo Independent</i> .
<i>Free Press</i> (Waterford).	<i>Sport</i> (Dublin).
<i>Galway Express</i> .	<i>Sunday Independent</i> (Dublin).
<i>General Advertiser</i> (Dublin).	<i>Tuam Herald</i> .
<i>Ireland's Own</i> (Dublin).	<i>Tyrone Constitution</i> (Omagh).
<i>Irish Catholic</i> (Dublin).	<i>Weekly Freeman and Supplement</i> .
<i>Irish Daily Independent</i> (Dublin).	<i>Weekly Irish Times</i> .
<i>Irish Emerald</i> (Dublin).	<i>Western News</i> (Ballinasloe).
<i>Irish Freedom</i> .	<i>Westmeath Examiner</i> (Mullingar).
<i>Irish News</i> (Belfast).	<i>Wexford People</i> .
<i>Irish Post</i> (Cavan).	<i>Wicklow News-Letter</i> .
<i>Irish Weekly Independent</i> .	<i>Wicklow People</i> .
<i>Irish Weekly</i> (Belfast).	<i>Witness, The</i> (Belfast).

The Royal Dublin Society has continued its generous gift of daily and weekly papers as follows :—

<i>Belfast News-Letter</i> .	<i>Illustrated Sporting & Dramatic News</i> .
<i>Cork Constitution</i> .	<i>Illustration</i> (Paris).
<i>Daily Express</i> (Dublin).	<i>Illustrirte Zeitung</i> .
<i>Dublin Evening Mail</i> .	<i>Journal de Débats</i> (Paris).
<i>Evening Herald</i> .	<i>Lady's Pictorial</i> .
<i>Evening Telegraph</i> .	<i>Morning Post</i> .
<i>Daily Graphic</i> .	<i>New York Tribune</i> .
<i>Daily Mail</i> .	<i>Leslie's Weekly</i> (New York).
<i>Daily News</i> .	<i>Pall Mall Gazette</i> .
<i>Daily Chronicle</i> .	<i>Queen</i> .
<i>Daily Telegraph</i> .	<i>Evening Standard and St. James's Gazette</i> .
<i>Freeman's Journal</i> .	<i>Sketch</i> .
<i>Financial News</i> .	<i>Sphere</i> .
<i>Figaro</i> (Paris).	<i>Standard</i> .
<i>Globe</i> .	<i>Tatler</i> .
<i>Graphic</i> .	<i>Times</i> .
<i>Scotsman</i> .	<i>Truth</i> .
<i>Illustrated London News</i> .	<i>Westminster Gazette</i> .
<i>Irish Daily Independent</i> .	<i>World</i> .
<i>Irish Times</i> .	

The following societies present publications annually :—

- The Royal Society of Edinburgh : *Transactions and Proceedings.*
- The Royal Society : *Proceedings.*
- The Royal Dublin Society : *Proceedings, and Scientific Proceedings and Transactions.*
- The Royal Irish Academy : *Proceedings, Transactions, and Todd Lectures.*
- Royal Society of Antiquaries, Ireland : *Journal.*
- The County Kildare Archaeological Society : *Journal.*
- Belfast Naturalists' Field Club : *Report and Proceedings.*
- Royal Institute of British Architects : *Journal, and Calendar.*
- Society of Chemical Industry : *Journal.*
- Society for the Preservation of the Irish Language : *Report.*
- Royal Academy of Medicine in Ireland : *Transactions.*
- Institute of Bankers in Ireland : *Journal.*
- North Munster Archaeological Society : *Journal.*

The following periodical publications have been presented in the year 1911 to the National Library of Ireland, either by the publishers, or by private donors, or by public bodies :—

- Alliance News.*
- Board of Trade Journal.*
- Board of Trade Labour Gazette.*
- Board of Agriculture Journal.*
- British Medical Journal.*
- Bulletin, Department of Labor, U.S.A.*
- Christian Science Journal.*
- Civil Service Competitor.*
- Civil Service Weekly.*
- Cyclists' Touring Club Gazette.*
- Department of Agriculture and Technical Instruction for Ireland "Journal."*
- Drapers' Record.*
- Father Mathew Record.*
- Free Russia.*
- Gentlewoman.*
- International Theosophical Chronicle.*
- Irish Cyclist.*
- Irish Draper.*
- Irish Field.*
- Irish Homestead.*
- Irish Ironmonger.*
- Irisleabhar Múighe Nuadh.*
- Irish Rosary.*
- Irish Tobacco Trade Journal.*
- Irish Vintner and Grocer.*
- Kew Bulletin.*
- Musical Herald.*
- Nation in Arms.*
- New Century Path.*
- New Church Magazine.*
- Pharmaceutical Journal.*
- Propriété Industrielle.*
- Socialist, The.*
- T.C.D.*

APPENDIX II.

THIRTEENTH REPORT OF THE LIBRARIAN, 1911-12

NEW SERIES

TO THE COUNCIL OF TRUSTEES

This is the Thirteenth Report of the new series ordered in January, 1900, in which the Librarian addresses to the Trustees an informal statement upon some points in the affairs of the Library which he hopes may be of interest and not unfit for publicity.

Author Catalogue

The preparation of the Author Catalogue for the Press is a work which engages almost the entire attention of one of the officers. There are now five volumes of the new quarto series, which include accessions, as well as fresh entries for books already catalogued imperfectly, from 1902-8, two of them being double volumes. Proofs of the Catalogue for 1909 are now coming in, and it is believed that this will be issued before the end of the present year. Meanwhile, the slips for 1910-11, amalgamated so as to form one volume, are being prepared for press. Arrangements with the printer, to ensure a steady supply of proofs, have not hitherto been very satisfactory, but recently there has been an improvement, and it is hoped that in future the printed Catalogue will be kept more nearly up to date. Meanwhile, the demands of readers with regard to entries not yet in the printed Catalogue, are, of course, met by the card Catalogue, which is written up from day to day.

Desk Author Catalogue

The work of inserting entries in the Desk Author Catalogue has proceeded steadily during the year ending March 31st, 1912. All entries from the Author Catalogue for 1906-7 have been intercalated; and work is in progress on the entries of 1908. Opportunity has been found, as in former years, for rectification of several parts of this Desk Catalogue where the titles had become confused. Among the titles re-arranged were the following, and their many neighbours:—Hoffmann, Hogan, Hogarth, Hogg, Holbein, Holmes, Morris, Stead, Steele, Steevens, Stephens.

Cataloguers' Work

The work of cataloguing all new books acquired by purchase has been continued. The important series, "Petermann's Mittheilungen aus Justus Perthes' Geographischer Anstalt," consisting of separate monographs in geographical exploration, was minutely dealt with, monograph by monograph. Various recent donations have been catalogued, and further work has been done on the books presented in past years by Father Coleman and others. Many more of the Government Publications of the United States, presented by that Government, in particular those issued by the Department of Agriculture, have been catalogued and classified. The task of classifying the latter raised various important questions, and necessitated revision of part of the Section Agriculture, to accord with Otlet's extension of the Decimal Classification—familiarily known as the "Brussels" extension.

Decennial Subject-Index, 1894-1903

One of the important events of the past year is the publication, in November, 1911, of the Subject-Index, in one alphabet, for the years 1894-1903. It is a continuation of the Subject-Index included within the "Supplemental Catalogues" issued to cover the twenty years 1874-1893, by the late Librarian, William Archer, F.R.S. In these fourteen volumes, subject and author entries were blended, in alphabetical order. Trial of this form of catalogue—the "Dictionary Catalogue"—convinced

the Trustees that the Library would be better served by separating subject entries from author entries, and by making each volume of the separate "Subject-Index," in one alphabet, relate to the acquisitions of several years. The intervals between the publication of successive volumes of this Index are bridged by a card index, kept up from day to day.

Desk Subject Index

For a long time we have been pasting down in eight folio ledgers, for Reading-room use, subject entries cut from the "Supplemental Catalogues" 1874-1893 mentioned above. This task was practically completed during the past year. Accordingly, the entries, which were irritatingly scattered through fourteen small volumes, are now alphabetically arranged in sequence. Since November, 1911, they have been reinforced by incorporating with them the entries of the Decennial Subject-Index. Thus the Catalogue Desk presents to the student a tolerable printed Subject-Index relating to the books acquired during the thirty years 1874-1903.

Continuation of the Subject-Index

The subject entries written during the years 1904-1910 have been arranged in alphabetical order, in preparation for printing. With them have been blended those subject-entries, written a few years ago, which relate to the large set of volumes of pamphlets possessed by the Library. Finally, all the subject slips, written 1899-1903 by specially appointed cataloguers, for the older part of the Library acquired prior to 1874, are being added, and the volume, when printed, will thus furnish a useful key to the Library between its foundation early in the eighteenth century and 1874, and again between 1904 and 1910. When the entries cut from a copy of this volume shall be incorporated with the folio Desk Ledgers, described above, a Subject-Index of reputable merit to the General Library up to 1910 will at length be at the service of students. The plan of the Trustees is to continue the work by a series of quinquennial volumes (as 1911-1915, 1916-1920, and so on), the readers being served in the intervals, as remarked above, by subject cards, constantly typed and inserted up to date.

Subject-Index of Irish Language and Literature

The Subject-Index of works relating to the Irish language and literature, to which attention was directed in the last report of the Trustees, has now been completed and is ready for the printer. All the Celtic periodicals, publications of learned societies, and general philological reviews, in which Irish subjects are treated, have been examined, and full bibliographical entries made. The need for such a publication has been often expressed by students of Gaelic, and this Subject-Index, it can be confidently stated, will serve as a guide to this scattered and otherwise inaccessible literature. H.M. Stationery Office has sanctioned an edition adequate to meet both the demands of the public when placed on sale, and of the institutions abroad which continually enrich our Library with their publications, and desire an exchange.

Maps

Former reports have frequently referred to the arrangement and cataloguing of Irish maps. During the past year we have made an important advance in arranging the General Collection. Apart from atlas volumes, and other organised sets, the Library possesses a mass of separate maps, of all countries and of widely ranging date, varying in size from an area of a few square inches, to six or eight square yards. After repair and cleaning, these maps have been prepared for ranging together by mounting the smaller on sheets of strong paper, and by dividing the very large ones into long sections of the height of the original sheets. All are now classified by countries, and are being bound in a series of volumes which will fit the special map cases in the Map Room. A catalogue on cards of the whole of this general collection of maps, British and foreign, has been begun and is in progress.

Donations

The gifts of H.M. Queen Alexandra, of Mr. J. Pierpont Morgan, and of Frau Professor Stern have been mentioned specially by the Trustees in their Report. The Library is much indebted to many other donors, whose gifts have been enumerated in Appendix I. Particular mention should also be made of the generosity of Mr. P. J. O'Reilly, F.S.A., who presented his handsomely bound set of the *Annales Archéologiques*, that important repertory of mediæval ecclesiastical archaeology conducted by Didron aîné, and continued by Edouard Didron, 26 vols. 4to. 1844-1869; also Thomas Dring's rare work, entitled, *Catalogue of the lords, knights, and gentlemen that have compounded for their estates* [17th cent.], and several other valuable books. Mr. E. R. McClintock Dix added to his many benefactions the gift of his collections of books printed in Dublin during the seventeenth century, comprising upwards of 250 volumes. Miss Hutton, Dundrum, presented six volumes, formed by her father, Mr. Lucius O. Hutton, of newspaper cuttings from *Times* and *Athenæum*, which record sales at Christie's, Sotheby's, and elsewhere of valuable books, coins, pictures, stamps, engravings and objects of vertu of all kinds. These cuttings are arranged in chronological order between 1895 and March, 1908, and each volume is furnished with an excellent *Index rerum et nominum*.

Joly Collection

Among the tasks begun during the period of closure last July was that of placing in the volumes of the Joly Collection the mark which denotes their classified order on the shelves. During that period also the impressing of the Library stamp on these books made considerable progress. Much of this impressing, in any case, has now been done. All books returned by the binder are examined and fully stamped prior to replacement on the shelves, and thousands of volumes in the Joly collection have been thus dealt with during the past ten years.

Joly Pamphlets and Music

Those pamphlets of the Joly Collection which in large numbers have been bound and catalogued in recent years, and hitherto arranged on shelves in rough alphabetical order, were classified and placed in the order adopted throughout the rest of the Library. As to the sheet music of the Joly Collection, our advance during the year has not been as great as hoped. However, instrumental music has been taken out and brought together, and piano music separately arranged. The work on the bundles of Irish song music, previously reported, has been revised, and this section is now ready for the binder, and has been practically consulted by scholars with greater facility during the past year.

Re-arrangement of large sections

Though no considerable structural improvements marked the past year, the Trustees, as noted in their Report, have received intimation that two important enlargements of book-storage, which had been recommended by them in past years, will soon be put in hands. However, during the period of closure last July, a considerable space for books was gained on the Attic floor of the Book-Store by altering shelving with a carpenter's aid, so as to fit more exactly the long series of Parliamentary Blue-books stored there. Room for many hundreds of additional folio volumes was thus obtained. The improvement could be carried out only during the weeks of closure, because it involved the removal, dusting, and replacement of many thousands of the volumes of this great series, which begins with the first year of the nineteenth century.

Conclusion

It is not, of course, possible to represent adequately in any one of these reports all the administrative activities of the year: in the series special note is given now to one prominent task, now to another.

THOMAS W. LYSTER
Librarian

EAST INDIA. SANITARY MEASURES PROGRESS. Papers relating to the Imperial Malaria Conference, &c.; Food and Drugs; Town Planning; Vital Statistics, &c. [Cd. 6538.] ..	2s.
DOMINIONS. ROYAL COMMISSION. NATURAL RESOURCES, TRADE, &c. First Interim Report, with Evidence, &c. [Cd. 6515, 6516, 6517.] ..	6s. 3½d.
JUDICIAL STATISTICS, SCOTLAND, 1911. [Cd. 6529.] ..	1s. 6d.
CIVIL SERVICE. ROYAL COMMISSION. Second Report, with Evidence, &c. [Cd. 6534, 6535.] ..	5s. 11d.
DURATION OF BUILDINGS FOR SMALL HOLDINGS. Report of Committee. [Cd. 6536.] ..	2½d.
INDUSTRIAL DIRECTORY, UNITED KINGDOM, 1913. [Cd. 6546.] ..	1s. 2d.
Military:—	
ARMY REVIEW. Vol. 4. No. 1. Jan. 1913 ..	1s.
COURSES OF INSTRUCTION, 1913-14 ..	2d.
DIAL SIGHT. No. 7. Instructions for the use of the ..	1d.
EGYPT. BRITISH FORCE IN. Standing Orders. 1912 ..	1s.
EQUIPMENT REGULATIONS:—	
Part I. 1912 ..	1s.
Part 2. Details. Sec. XVII. Officers Training Corps. 1912 ..	3d.
ESTABLISHMENTS. WAR:—	
Part I. Expeditionary Force. 1913 ..	8d.
Part V. Reserve, Depot, and other Regimental Units maintained at Home after Mobilization. (Provisional) ..	4d.
FIELD SERVICE REGULATIONS. Part I. Operations. 1909. [Reprinted, with Amendments, 1912] ..	1s.
LAND WARFARE. An Exposition of the Laws and Usages of War on Land, for the guidance of Officers of H. M. Army ..	1s.
MAP READING. Notes on. For use in Army Schools. 1912 ..	3d.
MUNICIPIAL REGULATIONS. Part I. 1909. [Reprinted, with Amendments, 1912] ..	6d.
ORDNANCE CORPS. ARMY. Standing Orders, 1912 ..	6d.
RECRUITING FOR THE REGULAR ARMY AND THE SPECIAL RESERVE. Regulations, 1912 ..	6d.
RUSSO-JAPANESE WAR. Official History (Naval and Military):—	
Vol. II. <i>Liao-Yang, the Sha-ho, Port Arthur.</i> With case of maps ..	15s.
SECTIONS OF UNITS OF THE Regular Forces, Militia, Special Reserve, and Territorial Force. No. 39. Jan. 1913 ..	2d.
SUDAN ALMANAC, 1913. Compiled in the Intelligence Department, Cairo ..	1s.
TRANSPORT. PACK. Notes on ..	1d.
Admiralty Publications:—	
GRADUATION OF SURVEYS AND CHARTS on the Gnomonic Projection. Compression $\frac{1}{1000}$..	6d.
NAUTICAL ALMANAC and Astronomical Ephemeris for 1915 ..	2s. 6d.
PACIFIC ISLANDS, Vol. III. Supplement, 1912 ..	—
RESERVE. ROYAL NAVAL. (MEM.) REGULATIONS. Addenda, 1912 ..	3d.
Board of Trade:—	
MERCHANT SHIPPING. Acts of Parliament, Regulations, Orders, Instructions, and Notices now (Nov. 1912) in force. List of the principal ..	3d.
NATIONAL INSURANCE ACT, 1911. Part II. UNEMPLOYMENT INSURANCE. Decisions given by the Umpire. Vol. III. Being those published in the "Board of Trade Journals," Sept. 19 to Dec. 26, 1912, inclusive. With Index ..	3d.
Local Government Board:—	
CANAL BOATS ACTS, 1877 and 1884. Extract from Board's Report for 1911-12 ..	2d.
INSPECTORS OF FOODS. REPORT ON THE WORK OF. Extract from the Report of the Board's Medical Officer for 1911-12 ..	2d.
INTERCEPTING TRAPS IN HOUSE DRAINS. Minutes of Evidence taken before the Committee appointed to inquire and report with regard to the use of. [The Report was published as Parliamentary Paper [Cd. 6359] of 1912] ..	2s.
NATIONAL INSURANCE ACT, 1911. USE OF BUILDINGS OF Local Authorities for the Audit of Accounts of Approved Societies and purposes connected therewith. Circular, Dec. 5, 1912, to Councils of Boroughs, Urban and Rural Districts, and to Guardians ..	1d.
REPORTS ON PUBLIC HEALTH AND MEDICAL SUBJECTS. New Series:—	
75. Sanitary Circumstances and Administration of the East Srow Rural District ..	3d.
SALE OF FOOD AND DRUGS ACTS. Extract from Board's Report for 1911-12 ..	4d.
Various:—	
ASTRONAUTICS. ADVISORY COMMITTEE FOR. Technical Report for 1911-12. With Appendices ..	1s.
BAROMETRIC MANUAL for the use of Seamen. A Text-book of Marine Meteorology, with an Appendix on the Thermometer, Hygrometer, and Hydrometer. 7th Edition ..	6d.
COMMERCIAL TREATIES, &c., between Great Britain and Foreign Powers. Handbook of ..	10s.
HOME OFFICE:—	
COAL MINES. Draft General Regulations under sec. 86 of the Coal Mines Act, 1911. With Circular Letter, Jan. 1, 1913 ..	2½d.
EXPLOSIVES AT MINES. STORAGE OF. Memorandum on ..	1d.
STEAM BOILERS. Memorandum on. Form 415. Sept. 1912 ..	1s. 3d.
LAND REGISTRY. Land Transfer Rules, 1903, 1907, and 1908 (Consolidated), the Land Transfer Fee Order, 1908, Table of Fees, and Index ..	6d.
SMALL LANDHOLDERS (SCOTLAND) ACTS, 1886 to 1911. Rules of the Scottish Land Court, with Instructions, Forms, and Tables of Fees ..	1s. 6d.
UGANDA. ANGLO-GERMAN-BELGIAN BOUNDARY COMMISSION, 1911. Report on the Work of the British Section ..	3s.

DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION FOR IRELAND.

TWELFTH
ANNUAL GENERAL REPORT
OF THE DEPARTMENT,
1911-12.

Presented to both Houses of Parliament by Command of His Majesty.



LONDON :

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

To be purchased, either directly or through any Bookseller, from

E. PONSONBY, LTD., 116 GRAYSON STREET, DUBLIN; or
WYMAN AND SONS, LTD., FETTER LANE, E.C., & 32 ABINGDON ST., LONDON, S.W.; and
54 ST. MARY STREET, CARDIFF; or

H.M. STATIONERY OFFICE (SCOTTISH BRANCH), 23 FORTH STREET, EDINBURGH;

or from the Agencies in the British Colonies and Dependencies,
the United States of America, the Continent of Europe and Abroad of
T. FISHER UNWIN, LONDON, W.C.

PRINTED BY

BROWNE AND NOLAN, LTD., NASSAU STREET, DUBLIN.

1913

[Cd. 6647.]

Price Two Shillings and Twopences.